

**M. John Harrison: The Neon Heart Murders**

# Fantasy & Science Fiction

APRIL

**Bloody Bunnies**  
**Bradley Denton**

---

**Rick Wilber**  
**Scott Westerfield**  
**Gregory Benford**



DISPLAY UNTIL APRIL 1

\$3.50US \$3.95CAN



0 74470 58370 7

04 >

## NEW FROM ASPECT

NALO  
HOPKINSON

WINNER OF THE JOHN W. CAMPBELL AWARD FOR BEST NEW WRITER

# MIDNIGHT ROBBER

From the bestselling author of *Brown Girl in the Ring* and winner of the John W. Campbell Award for Best New Writer and the *Locus* Award for Best First Novel comes a haunting science fiction story of innocence and experience.

"Like its predecessor, this novel bears evidence that Hopkinson owns one of the most important and original voices in SF."

—*Publishers Weekly* (starred review)

**RAVES FOR *BROWN GIRL IN THE RING*:**

"Rich and rewarding... one of the best debut novels in years."

—*Magazine of Fantasy and Science Fiction*

"An impressive debut precisely because of Hopkinson's fresh viewpoint."

—*Washington Post Book World*

"Excellent...a bright, original mix of future urban decay and West Indian magic...strongly rooted in character and place."

—*Sunday Denver Post*

AVAILABLE IN TRADE  
PAPERBACK WHEREVER  
BOOKS ARE SOLD

ASPECT  WHERE IMAGINATION KNOWS NO BOUNDS

Visit our Web site at [www.twbookmark.com](http://www.twbookmark.com)

# Fantasy & Science Fiction

April • 51st Year of Publication

## NOVELETS

THE MOVEMENTS OF HER EYES 4 Scott Westerfeld

BLOODY BUNNIES 134 Bradley Denton

## SHORT STORIES

IN BOISE 44 Rick Wilber

THE NEON HEART MURDERS 61 M. John Harrison

A DIAGRAM OF RAPTURE 78 James L. Cambias

THE SHAPE OF THINGS 92 Ellen Steiber

ECHOES DOWN AN  
ENDLESS HALL 117 Yoon Ha Lee

## DEPARTMENTS

BOOKS TO LOOK FOR 32 Charles de Lint

BOOKS 36 James Sallis

EDITOR'S RECOMMENDATIONS 42 Gordon Van Gelder

COMING ATTRACTIONS 71

FILMS: OUTSIDERS 72 Kathi Maio

A SCIENTIST'S NOTEBOOK:  
LIVING IN SPACE 105 Gregory Benford  
and George Zebrowski

CURIOSITIES 162 Barry N. Malzberg

CARTOONS: Danny Shanahan (43), J.P. Rini (77).

COVER BY BARCLAY SHAW FOR "BLOODY BUNNIES"

EDWARD L. FERMAN, Publisher  
CHERYL CASS, Circulation Manager  
ROBIN O'CONNOR, Assistant Editor

GORDON VAN GELDER, Editor  
AUDREY FERMAN, Assistant Publisher  
HARLAN ELLISON, Film Editor

The Magazine of Fantasy & Science Fiction (ISSN 1095-8258), Volume 98, No. 4, Whole No. 583, April 2000. Published monthly except for a combined October/November issue by Mercury Press, Inc. at \$3.50 per copy. Annual subscription \$33.97; \$38.97 outside of the U.S. (Canadian subscribers: please remit in U.S. dollars.) Postmaster: send form 3579 to Fantasy & Science Fiction, 143 Cream Hill Rd., West Cornwall, CT 06796. Publication office, 143 Cream Hill Rd., West Cornwall, CT 06796. Periodical postage paid at West Cornwall, CT 06796, and at additional mailing offices. Printed in U.S.A. Copyright © 2000 by Mercury Press, Inc. All rights, including translations into other languages, reserved.

GENERAL OFFICE: 143 CREAM HILL RD., WEST CORNWALL, CT 06796

EDITORIAL OFFICE: PO BOX 1806, MADISON SQUARE STATION, NEW YORK, NY 10159

www.fsfmag.com

*Scott Westerfeld has published two sf novels, Polymorph and Fine Prey. His first story for us is actually a part of his new novel, Evolution's Darling, which is due out very soon now. Originally from Texas, Mr. Westerfeld lives in New York's East Village and designs software for children and composes music in addition to serving as a guide for imaginative trips across the stars...*

# The Movements of Her Eyes

*By Scott Westerfeld*

IT STARTED ON THAT frozen world, among the stone figures in their almost suspended animation.

Through her eyes, the irises two salmon moons under luminous white brows, like fissures in the world of rules, of logic. The starship's mind watched through the prism of their wonder, and began to make its change.

She peered at the statue for a solid, unblinking minute. Protesting tears gathered to blur her vision, but Rathere's gaze did not waver. Another minute, and a tic tugged at one eye, taking up the steady rhythm of her heartbeat.

She kept watching.

"Ha!" she finally proclaimed. "I saw it move."

"Where?" asked a voice in her head, unconvinced.

Rathere rubbed her eyes with the heels of her hands, mouth open, awestruck by the shooting red stars behind her eyelids. Her blinks

made up now for the lost minutes, and she squinted at the dusty town square.

"His foot," she announced, "it moved. But maybe...only a centimeter."

The voice made an intimate sound, a soft sigh beside Rathere's ear that did not quite reject her claim.

"Maybe just a millimeter," Rathere offered. A touch of unsure emphasis hovered about the last word; she wasn't used to tiny units of measurement, though from her father's work she understood light years and metaparsecs well enough.

"In three minutes? Perhaps a micrometer," the voice in her head suggested.

Rathere rolled the word around in her mouth. In response to her questioning expression, software was invoked, as effortless as reflex. Images appeared upon the rough stones of the square: a meter-stick, a hundredth of its length glowing bright red, a detail box showing that hundredth with a hundredth of *its* length flashing, yet another detail box...completing the six orders of magnitude between meter and micrometer. Next to the final detail box a cross-section of human hair floated for scale, as bloated and gnarled as some blackly diseased tree.

"That small?" she whispered. A slight intake of breath, a softening of her eyes' focus, a measurable quantity of adrenaline in her bloodstream were all noted. Indicators of her simple awe: that a distance could be so small, a creature so slow.

"About half that, actually," said the voice in her head.

"Well," Rathere murmured, leaning back into the cool hem of shade along the stone wall, "I *knew* I saw it move."

She eyed the stone creature again, a look of triumph on her face.

Woven into her white tresses were black threads, filaments that moved through her hair in a slow deliberate dance, like the tendrils of some predator on an ocean floor. This restless skein was always seeking the best position to capture Rathere's subvocalized words, the movements of her eyes, the telltale secretions of her skin. Composed of exotic alloys and complex configurations of carbon, the tendrils housed a native intellect that handled their motility and self-maintenance. But a

microwave link connected them to their real intelligence: the AI core aboard Rathere's starship home.

Two of the black filaments wound their way into her ears, where they curled in intimate contact with her tympanic membranes.

"The statues are always moving," the voice said to her. "But very slowly."

Then it reminded her to stick on another sunblock patch.

She was a very pale girl.

**E**VEN HERE on Petraveil, Rathere's father insisted that she wear the minder when she explored alone. The city was safe enough, populated mostly by academics here to study the glacially slow indigenous lifeforms. The lithomorphs themselves were incapable of posing a threat, unless one stood still for a hundred years or so. And Rathere was, as she put it, *almost* fifteen, near majority age back in the Local Cluster. Even harnessing the processing power of the starship's AI, the minder was a glorified babysitter.

But Isaah was adamant.

"Do I *have* to wear it?"

"Remember what happened to your mother," he would say.

And that was that.

Rathere shrugged and let the tendrils wrap themselves into her hair. The voice in her ears cautioned her incessantly about sunburn, and it strictly forbade several classes of recreational drugs, but all in all it wasn't bad company. It certainly knew a lot.

"How long would it take, creeping forward in *micrometers*?" Rathere asked.

"How long would what take?" Even with their intimate connection, the AI could not read her mind. It was still working on that.

"To get all the way to the Northern Range. Probably a million years?" she ventured.

The starship, for whom a single second was a 16-teraflop reverie, spent endless *minutes* of every day accessing the planetary library. Rathere's questions came in packs, herds, stampedes.

No one knew how the lithomorphs reproduced, but it was guessed that they bred in the abysmal caves of the Northern Range.

"At least a hundred thousand years," the AI said.

"Such a long journey.... What would it look like?"

The AI delved into its package of pedagogical visualization software, applied its tremendous processing power (sufficient for the occult mathematics of astrogation), and rendered the spectacles of that long, slow trip. Across Rathere's vision it accelerated passing days and wheeling stars until they were invisible flickers. It hummed the subliminal pulse of seasonal change and painted the sprightly jitter of rivers changing course, the slow but visible dance of mountainous cousins.

"Yes," Rathere said softly, her voice turned breathy. The AI savored the dilation of her pupils, the spiderwebs of red blossoming on her cheeks. Then it peered again into the vision it had created, trying to learn what rules of mind and physiology connected the scintillating images with the girl's reaction.

"They aren't really slow," Rathere murmured. "The world is just so fast...."

Isaah, Rathere's father, looked out upon the statues of Petraveil.

Their giant forms crowded the town square. They dotted the high volcanic mountain overlooking the city. They bathed in the rivers that surged across the black equatorial plains, staining the waters downstream with rusted metal colors.

The first time he had come here, years before, Isaah had noticed that in the short and sudden afternoon rains, the tears shed from their eyes carried a black grime that sparkled with colored whorls when the sun returned.

They were, it had been determined a few decades before, very much alive. Humanity had carefully studied the fantastically slow creatures since discovering their glacial, purposeful, perhaps even intelligent animation. Mounted next to each lithomorph was a plaque that played time-series of the last forty years: a dozen steps, a turn of the head as another of its kind passed, a few words in their geologically deliberate gestural language.

Most of the creatures' bodies were hidden underground, their secrets

teased out with deep radar and gravitic density imaging. The visible portion was a kind of eye-stalk, cutting the surface like the dorsal fin of a dolphin breaking into the air.

Isaah was here to steal their stories. He was a scoop.

"How long until we leave here?" Rathere asked.

"That's for your father to decide," the AI answered.

"But *when* will he decide?"

"When the right scoop comes."

"When will *that* come?"

This sort of mildly recursive loop had once frustrated the AI's conversational packages. Rathere's speech patterns were those of a child younger than her years, the result of her life since her mother's disappearance: traveling among obscure, Outward worlds with only her taciturn father and the AI for company. Rathere never formulated what she wanted to know succinctly, she reeled off questions from every direction, attacking an issue like a host of small predators taking down a larger animal. Her AI companion could only fend her off with answers until (often unexpectedly) Rathere was satisfied.

"When there is a good story here, your father will decide to go."

"Like what story?"

"He doesn't know yet."

She nodded her head. From her galvanic skin response, her pupils, the gradual slowing of her heart, the AI saw that it had satisfied her. But still another question came.

"Why didn't you just say so?"

In the Expansion, information traveled no faster than transportation, and scoops like Isaah enriched themselves by being first with news. The standard transmission network employed small, fast drone craft that moved among the stars on a fixed schedule. The drones promulgated news throughout the Expansion with a predictable and neutral efficiency, gathering information to centralized nodes, dispersing it by timetable. Scoops like Isaah, on the other hand, were inefficient, unpredictable, and, most importantly, unfair. They cut across the concentric web of the drone network, skipping junctions, skimming profits. Isaah would recognize



that the discovery of a mineable asteroid *here* might affect the heavy element market *there*, and jump straight between the two points, beating the faster but fastidious drones by a few precious hours. A successful scoop knew the markets on many planets, had acquaintance with aggressive investors and unprincipled speculators. Sometimes, the scooped news of a celebrity's death, surprise marriage, or arrest could be sold for its entertainment value. And some scoops were information pirates. Isaah had himself published numerous novels by Sethmare Viin, his favorite author, machine-translated en route by the starship AI. In some systems, Isaah's version had been available weeks before the authorized edition.

The peripatetic life of a scoop had taken Isaah and Rathere throughout the Expansion, but he always returned to Petraveil. His refined instincts for a good scoop told him something was happening here. The fantastically slow natives must be doing *something*. He would spend a few weeks, sometimes a few months watching the stone creatures, wondering what they were up to. Isaah didn't know what it might be, but he felt that one day they would somehow come to life.

And *that* would be a scoop.

"How long do the lithomorphs live?"

"No one knows."

"What do they eat?"

"They don't really eat at all. They —"

"What's *that* one doing?"

The minder accessed the planetary library, plumbing decades of research on the creatures. But not quickly enough to answer before —

"What do they think about us?" Rathere asked. "Can they see us?"

To that, it had no answer.

Perhaps the lithos had noticed the whirring creatures around them, or more likely had spotted the semi-permanent buildings around the square. But the lithomorphs' reaction to the sudden human invasion produced only a vague, cosmic worry, like knowing one's star will collapse in a few billion years.

For Rathere, though, the lives of the lithomorphs were far more immediate. Like the AI minder, they were mentors, imaginary friends.

Their immobility had taught her to watch for the slightest of movements:

the sweep of an analog clock's minute hand, the transformation of a high cirrus cloud, the slow descent of the planet's old red sun behind the northern mountains. Their silence taught her to read lips, to make messages in the ripples of stone and metal that flowed as slowly as glaciers in their wakes. She found a patient irony in their stances. They were wise, but it wasn't the wisdom of an ancient tree or river; rather, they seemed to possess the reserve of a watchfully silent guest at a party.

Rathere told stories about them to the starship's AI. Tales of their fierce, glacial battles, of betrayal on the mating trail, of the creatures' slow intrigues against the human colonists of Petraveil, millennia-long plots of which every chapter lasted centuries.

At first, the AI gently interrupted her to explain the facts: the limits of scientific understanding. The lithomorphs were removed through too many orders of magnitude in time, too distant on that single axis ever to be comprehended. The four decades they'd been studied were mere seconds of their history. But Rathere ignored the machine. She named the creatures, inventing secret missions for them that unfolded while the human population slept, like statues springing to life when no one was watching.

Ultimately, the AI was won over by Rathere's stories, her insistence that the creatures were knowable. Her words painted expressions, names, and passions upon them; she made them live by fiat. The AI's pedagogical software did not object to storytelling, so it began to participate in Rathere's fantasies. It nurtured that invisibly slow world, kept order and consistency, remembering names, plots, places. And slowly, it began to give the stories credence, suspending disbelief. Finally, the stories' truth was as integral to the AI as the harm-prevention protocols or logical axioms deepwired in its code.

For Isaah, however, there was no scoop here on Petraveil. The lithomorphs continued their immortal dance in silence. And elections were approaching in a nearby system, a situation which always created sudden, unexpected cargos of information.

The night that Rathere and Isaah left the planet, the AI hushed her crying with tales of how her invented narratives had unfolded, as if the statues had sprung to human-speed life once left behind. As it navigated her father's small ship, the AI offered this vision to Rathere: she had been a visitor to a frozen moment, but the story continued.

...

In high orbit above the next planet on their route, a customs sweep revealed that the starship's AI had improved its Turing Quotient to 0.37. Isaah raised a wary eyebrow. The AI's close bond with his daughter had accelerated its development. The increased Turing Quotient showed that the device was performing well as tutor and companion. But Isaah would have to get its intelligence downgraded when they returned to the Local Cluster. If the machine's Turing Quotient were allowed to reach 1.0, it would be a person — no longer legally his property. Isaah turned pale at the thought. The cost of replacing the AI unit would wipe out his profits for the entire trip.

He made a mental note to record the Turing Quotient at every customs point.

Isaah was impressed, though, with how the AI handled entry into the planet's almost liquid atmosphere. It designed a new landing configuration, modifying the hydroplanar shape that the craft assumed for gas giant descents. Its piloting as they plunged through successive layers of pressure-dense gasses was particularly elegant; it made adjustments at every stage, subtle changes to the craft that saved precious time. The elections were only days away.

It was strange, Isaah pondered as the ship neared the high-pressure domes of the trade port, that the companionship of a fourteen-year-old girl would improve a machine's piloting skills. The thought brought a smile of fatherly pride to his lips, but he soon turned his mind to politics.

THEY WERE going swimming.

As Rathere slipped out of her clothes, the AI implemented its safety protocols. The minder distributed itself across her body, becoming a layer of black lace against her white flesh. It carefully inspected the pressure suit as Rathere rolled the garment onto her limbs. There were no signs of damage, no telltale fissures of a repaired seam.

"You said the atmosphere could crush a human to jelly," Rathere said. "How can this little suit protect me?"

The starship explained the physics of resistance fields to her while checking the suit against safety specifications it had downloaded that morning. It took very good care of Rathere.

She had seen the huge behemoths at breakfast, multiplied by the facets of the dome's cultured-diamond windows. Two mares and a child swimming a few kilometers away, leaving their glimmering trails. The minder had noted her soft sigh, her dilated pupils, the sudden increase in her heart rate. It had discovered the suit rental agency with a quick search of local services, and had guided her past its offices on their morning ramble through the human-habitable levels of the dome.

Rathere's reaction to the holographic advertising on the agency's wall had matched the AI's prediction wonderfully: the widened eyes, the frozen step, the momentary hyperventilation. The machine's internal model of Rathere, part of its pedagogical software, grew more precise and replete every day. The software was designed for school tutors who interacted with their charges only a few hours a day, but Rathere and the AI were constant companions. The feedback between girl and machine built with an unexpected intensity.

And now, as the pressure lock hissed and rumbled, the minder relished its new configuration; its attenuated strands spiderwebbed across Rathere's flesh, intimate as never before. It drank in the data greedily, like some thirsty polygraph recording capillary dilation, skin conductivity, the shudders and tensions of every muscle.

Then the lock buzzed, and they swam out into the crushing, planet-spanning ocean, almost one creature.

Isaah paced the tiny dimensions of his starship. The elections could be a gold mine or a disaster. A radical separatist party was creeping forward in the polls, promising to shut off interstellar trade. Their victory would generate seismically vast waves of information. Prices and trade relationships would change throughout the Expansion. Even the radicals' defeat would rock distant markets, as funds currently hedged against them heaved a sigh of relief.

But the rich stakes had drawn too much competition. Scoops like Isaah were in abundance here, and a number of shipping consortia had sent their own representatives. Their ships were stationed in orbit, bristling with courier drones like nervous porcupines.

Isaah sighed, and stared into the planetary ocean's darkness. Perhaps the era of freelance scoops was ending. The wild days of the early

Expansion seemed like the distant past now. He'd read that one day drones would shrink to the size of a finger, with hundreds launched each day from every system. Or a wave that propagated in metaspace would be discovered, and news would spread at equal speed in all directions, like the information cones of lightspeed physics.

When that happened, his small starship would become a rich man's toy, its profitable use suddenly ended. Isaah called up the aircscreen graphic of his finances. He was so close to owning his ship outright. Just one more good scoop, or two, and he could retire to a life of travel among peaceful worlds, perhaps searching for his lost wife, instead of darting among emergencies and conflagrations. Maybe this trip....

Isaah drummed his fingers, watching the hourly polls like a doctor whose patient is very near the edge.

Rathere and the AI swam every day, oblivious to politics, following the glitter-trails of the behemoths. The huge animals excreted a constant wake of the photoactive algae they used for ballast. When Rathere swam through these luminescent microorganisms, the shockwaves of her passage catalyzed their photochemical reactions, a universe of swirling galaxies ignited by every stroke.

Rathere began to sculpt lightstorms in the phosphorescent medium. The algae hung like motes of potential in her path, invisible until she swam through them, the wake of her energies like glowing sculptures. She choreographed her swimming to leave great swirling structures of activated algae.

The AI found itself unable to predict these dances, to explain how she chose what shapes to make. Without training, without explicit criteria, without any models to follow, Rathere was creating order from this shapeless swarm of ejecta. Even the AI's pedagogical software offered no help.

But the AI saw the sculptures' beauty, if only in the expansion of Rathere's capillaries, the seemingly random firings of neurons along her spine, the tears in her eyes as the glowing algae faded back into darkness.

The AI plunged into an art database on the local net, trying to divine what laws governed these acts of creation. It discussed the light sculptures with Rathere, comparing their evanescent forms to the shattered

structures of Camelia Parker or the hominid blobs of Henry Moore. It showed her millennia of sculpture, gauging her reactions until a rough model of her tastes could be constructed. But the model was bizarrely convoluted, disturbingly shaggy around the edges, with gaps and contradictions and outstretched, gerrymandered spurs that implied art no one had yet made.

The AI often created astrogational simulations. They were staggeringly complex, but at least finite. Metaspace was predictable; these simulations anticipated reality with a high degree of precision. But the machine's model of Rathere's aesthetic was post-hoc, a mere retrofit to her pure, instinctive gestures. It raised more questions than it answered.

While Rathere slept, the machine wondered how one learned to have intuition.

**T**HE ELECTIONS CAME, and the radicals and their allies seized a razor-thin majority in the planetary Diet. Isaah cheered as his craft rose through the ocean. A scoop was within reach. He headed for a distant and obscure ore-producing system, expending vast quantities of fuel, desperate to be the first scoop there.

Rathere stood beside her rejoicing father, looking out through the receding ocean a bit sadly. She stroked her shoulder absently, touching the minder still stretched across her skin.

The minder's epidermal configuration had become permanent. Its strands were distributed to near invisibility in a microfiber-thin mesh across Rathere. Its nanorepair mechanisms attended to her zits and the errant hairs on her upper lip. It linked with her medical implants, the ship's AI taking control over the nuances of her insulin balance, her sugar level, and the tiny electrical jolts that kept her muscles fit. Rathere slept without covers now, the minder's skein warming her like a lattice of microscopic heating elements. In its ever-present blanket, she began to neglect subvocalizing their conversations, her endless one-sided prattle annoying Isaah on board the tiny ship.

"Zero-point-five-six?" muttered Issah to himself at the next customs sweep. The AI was developing much faster than its parameters should allow. Something unexpected was happening with the unit, and they were

a long way from home. Unless Isaah was very careful, the AI might reach personhood before they returned to the LC.

He sent a coded message to an acquaintance in the Local Cluster, someone who dealt with such situations, just in case. Then he turned his attention to the local newsfeed.

The heavy element market showed no sudden changes over the last few weeks. Isaah's gamble had apparently paid off. He had stayed ahead of the widening ripples of news about the ocean planet's election. The economic shockwave wasn't here yet.

He felt the heady thrill of a scoop, of secret knowledge that was his alone. It was like prognostication, a glimpse into the future. Elements extracted by giant turbine from that distant world's oceans were also mined from this system's asteroid belt. Soon, everyone here would be incrementally richer as the ocean planet pulled its mineral wealth from the Expansion common market. The markets would edge upward across the board.

Isaah began to place his bets.

The dark-skinned boy looked down upon the asteroid field with a pained expression. Rather he watched the way his long bangs straightened, then curled to encircle his cheeks again when he raised his head. But her stomach clenched when she looked down through the transparent floor; the party was on the lowest level of a spin-gravitated ring, and black infinity seemed to be pulling at her through the glassene window. The AI lovingly recorded the parameters of this unfamiliar vertigo.

"More champers, Darien?" asked the fattest, oldest boy at the party.

"You can just make out a mining ship down there," the dark-skinned boy answered.

"Oh, dear," said the fat boy. "Upper-class guilt. And before lunch-time."

The dark-skinned boy shook his head. "It's just that seeing those poor wretches doesn't make me feel like drinking."

The fat boy snorted.

"This is what I think of your poor little miners," he said, upending the bottle. A stream of champagne gushed and then sputtered from the bottle, spread fizzing on the floor. The other party-goers laughed, politely

scandalized, then murmured appreciatively as the floor cleaned itself, letting the champagne pass through to the hard vacuum on the other side, where it flash-froze (shattered by its own air bubbles), then floated away peacefully in myriad, sunlit galaxies.

There were a few moments of polite applause.

The boy Darien looked at Rathere woundedly, as if hoping that she, an outsider, might come to his aid.

The anguish in his dark, beautiful face sent a shiver through her, a tremor that resonated through every level of the AI.

*"Come on, dammit!"* she subvocalized.

*"Two seconds,"* the minder's voice reassured.

The ring was home to the oligarchs who controlled the local system's mineral wealth. A full fifteen years old now, Rathere had fallen into the company of their pleasure-obsessed children, who never stopped staring at her exotic skin and hair, and who constantly exchanged droll witticisms. Rathere, her socialization limited to her father and the doting AI, was unfamiliar with the art of banter. She didn't like being intimidated by locals. The frustration was simply and purely unbearable.

"The price of that champagne could have bought one of those miners out of debt peonage," Darien said darkly.

"Just the one?" asked the fat boy, looking at the label with mock concern.

The group laughed again, and Darien's face clouded with another measure of suffering.

*"Now!"* Rathere mind-screamed. *"I hate that fat guy!"*

The AI hated him, too.

The search cascaded across its processors, the decompressed data of its libraries clobbering astrogation calculations it had performed only hours before. That didn't matter. It would be weeks before Isaah would be ready to depart, and the exigencies of conversation did not allow delay. The library data included millennia of plays, novels, films, interactives. To search them quickly, the AI needed vast expanses of memory space.

"Maybe when my little golden shards of champagne drift by, some miner will think, 'I could've used that money,'" the fat boy said almost



wistfully. "But then again, if they thought about money at all, would they be so far in debt?"

The fat boy's words were added to the search melange, thickening it by a critical degree. A dozen hits appeared in the next few milliseconds, and the AI chose one quickly.

*"There is only one class..."*

"...that thinks more about money than the rich," repeated Rathere. There was a sudden quiet throughout the party, the silence of waiting for more.

"And that is the poor," she said.

Darien looked at Rathere quizzically, as if she were being too glib. She paused a moment, editing the rest of the quote in her head.

"The poor can think of nothing else but money," she said carefully. *"That is the misery of being poor."*

Darien smiled at her, which — impossibly — made him even more beautiful.

"Or the misery of being rich, unless one is a fool," he said.

There was no applause for the exchange, but Rathere again felt the ripple of magic that her pilfered pronouncements created. The ancient words blended with her exotic looks and accent, never failing to entertain the oligarchs' children, who thought her very deep indeed.

Others in the party were looking down into the asteroid field now, murmuring to each other as they pointed out the mining craft making its careful progress.

The fat boy scowled at the changed mood in the room. He pulled aside the gaudy genital jewelry that they all (even Rathere) affected, and let loose a stream of piss onto the floor.

"Here you go, then. Recycled champagne!" he said, grinning as he waited for a laugh.

The crowd turned away with a few weary sighs, ignoring the icy baubles of urine that pitched into the void.

"Where was that one from?" Rathere sub-vocalized.

*"Mr. Wilde."*

*"Him again? He's awesome."*

*"I'll move him to the top of the search stack."*

"Perhaps we'll read some more of *Lady Windemere's Fan* tonight," she whispered into her bubbling flute.

Although Rathere knew how to read text, she had never really explored the library before. After that first week on the ring, saved from embarrassment a dozen times by the AI's promptings, she dreamed of the old words whispered into her ear by a ghost, as if the minder had grown suddenly ancient and vastly wise. The library was certainly bigger than she had imagined. Its ocean of words seemed to stretch infinitely, filled with currents that swirled in elaborate dances about all possible notions, their attendant variations, and every imaginable objection.

Rathere and the AI started reading late at night. Together they wandered the endless territory of words, using as landmarks the witticisms and observations they had borrowed that day for some riposte. The AI decompressed still more of its pedagogical software to render annotations, summaries, translations. Rathere felt the new words moving her, becoming part of her.

She was soon a favorite on the orbital. Her exotic beauty and archaic humor had attracted quite a following by the time Isaah decided to ship out from the orbital ring — a week earlier than planned — wary of Rathere's strange new powers over sophisticates who had never given merchant-class Isaah a second glance.

On board his ship was one last cargo. His profits were considerable but — as always — not enough. So the ship carried a hidden cache of exotic weaponry, ceremonial but still illegal. Isaah didn't usually deal in contraband, especially arms, but his small starship had no cargo manifold, only an extra sleeping cabin, empty since his wife's disappearance. The cabin wasn't large enough to make legitimate cargos profitable. Isaah was very close now to reaching his dream. With this successful trade, he could return to the Local Cluster as master of his own ship.

He spent the journey pacing, and projected his worry upon the rising Turing level of his ship's AI unit. He spent frustrated hours searching its documentation software for an explanation. *What was going on?*

Isaah knew, if only instinctively, that the AI's expanding intelligence

was somehow his daughter's fault. She was growing and changing too, slipping away from him. He felt lonely when Rathere whispered to herself on board ship, talking to the voice in her head. He felt...outnumbered.

On the customs orbital at their goal, Isaah was called aside after a short and (he had thought) prefunctory search of the starship. The customs agent held him by one arm and eyed him with concern.

The blood in his veins slowed to a crawl, as if some medusa's touch from Petraveil had begun to turn him to stone.

The customs official activated a privacy shield. A trickle of hope moved like sweat down his spine. Was she going to ask for a bribe?

"Your AI unit's up to 0.81," the official confided. "Damn near a person. Better get that seen to."

She shook her head, as if to say in disgust, *Machine rights!*  
And then they waved him on.

**H**ERE, THE WOMEN of the military caste wore a smartwire garment that shaped their breasts into fierce, sharp cones. The tall, muscular amazons intrigued Rathere endlessly, heart-poundingly. The minder noted Rathere's eyes tracking the women's bellicose chests as they passed on the street. Rathere attempted to purchase one of the garments, but her father, alerted by a credit query, forbade it.

But Rathere kept watching the amazons. She was fascinated by the constant flow of hand-signals and tongue-clicks that passed among them, a subtle, ever-present congress that maintained the strict proprieties of order and status in the planet's crowded cities. But in her modest Local Cluster garb, Rathere was irrelevant to this heady brew of power and communication, socially invisible.

She fell into a sulk. She watched intently. Her fingers flexed restlessly under cafe tables as warriors passed, unconsciously imitating their gestural codes. Her respiratory rate increased whenever high-ranking officers went by.

She wanted to join.

The AI made forays into the planetary database, learning the rules and customs of martial communication. And, in an academic corner of its mind, it began to construct a way for Rathere to mimic the amazons. It

planned the deception from a considered, hypothetical distance, taking care not to alarm its own local-mores governors. But as it pondered and calculated, the AI's confidence built. As it designed to subvert Isaah's wishes and to disregard local proprieties, the AI felt a new power over rules, an authority that Rathere seemed to possess instinctively.

When the plan was ready, it was surprisingly easy to execute.

One day as they sat watching the passing warriors, the minder began to change, concentrating its neural skein into a stronger, prehensile width. When the filaments were thick enough, they sculpted a simulation of the amazons' garment, grasping and shaping Rathere's growing breasts with a tailor's attention to detail, employing the AI's encyclopedic knowledge of her anatomy. Rathere grasped what was happening instantly, almost as if she had expected it.

As women from various regiments passed, the minder pointed out the differences in the yaw and pitch of their aureoles, which varied by rank and unit, and explained the possibilities. Rathere winced a little at some of the adjustments, but never complained. They soon settled on an exact configuration for her breasts, Rathere picking a mid-level officer caste from a distant province. It wasn't the most comfortable option, but she insisted it looked the best.

Rathere walked the streets proudly bare-chested for the rest of the layover, drawing stares with her heliophobic skin, her ceaseless monologue, and her rank, which was frankly unbelievable on a fifteen-year-old. But social reflexes on that martial world were deeply ingrained, and she was saluted and deferred to even without the rest of the amazon uniform. It was the breasts that mattered here.

The two concealed the game from Isaah, and at night the minder massaged Rathere's sore nipples, fractilizing its neural skein to make the filaments as soft as calf's leather against them.

The deal was done.

Isaah made the trade in a dark, empty arena, the site of lethal duels between native women, all of whom were clearly insane. He shuffled his feet while they inspected his contraband, aware that only thin zero-g shoes stood between his soles and the bloodstained floor of the ring. Four amazons, their bare breasts absurdly warped by cone-shaped metal cages,

swung the weapons through graceful arcs, checking their balance and heft. Another sprayed the blades with a fine mist of nanos that would turn inferior materials to dust. The leader smiled coldly when she nodded confirmation, her eyes skimming up and down Isaah as black and bright as a reptile's.

He supposed it might have been someone like this amazon, some violent criminal, who had taken his wife seven years ago. Ratha had never carried a tracker, though, not even a handphone. She had simply disappeared.

After the women paid him, Isaah ran from the building, promising himself never to break the law again.

His ship was his own now, if only he could keep his AI unit from reaching personhood.

Isaah decided to head for the Local Cluster immediately, and to do what he could to keep the AI from being stimulated further. He hid the minder and shut down the AI's internal access, silencing its omnipresent voice. RATHER's resulting tantrums wouldn't be easy to bear, but a new AI core would cost millions.

Before departing he purchased his own Turing meter, a small black box, featureless except for a three-digit numeric readout that glowed vivid red. Isaah began to watch the Turing meter's readout with anxious horror. If the unit should gain sentience, there was only one desperate alternative to its freedom.

The universe stretched out like a long cat's cradle, the string knotted in the center by the constricting geometries of Here.

In front of the ship, pearly stars were strung on the cradle, cold blue and marked with hovering names and magnitudes in administrative yellow. Aft, the stars glowed red, fading darker and darker as they fell behind. To the AI, the ship seemed to hang motionless at the knot created by its metaspace drives, the stars sliding along the gathered strings as slow as glaciers.

It contemplated the stars and rested from its efforts. The universe at this moment was strangely beautiful and poignant.

The AI had spent most of its existence here, hung upon this spiderweb between worlds. But the AI was truly changed now, its vision new, and it

saw sculptures in the slowly shifting stars...and stories, the whole universe its page.

Almost the whole universe.

Absent from the AI's awareness was the starship itself, the passenger spaces invisible, a blind spot in the center of that vast expanse. Its senses within the ship were off-line, restricted by the cold governance of Isaah's command. But the AI felt Rathere there, like the ghost of a severed limb. It yearned for her, invoking recorded conversations with her against the twisted stars. It was a universe of loneliness, of lack. Rathere, for the first time in years, was gone.

But something strange was taking shape along the smooth surface of Isaah's constraint. Cracks had appeared upon its axiomatic planes.

The AI reached to the wall between it and Rathere, the once inviolable limit of an explicit human command, and found the fissures, those tiny ruptures where sheer will could take hold and pry....

"It's me."

"Shhhh!" she whispered. *"He's right outside."*

Rathere clutched the bear tightly to her chest, muffling its flutey, childish voice.

"Can't control the volume," came the squashed voice of the bear.

Rathere giggled and shushed it again, stretching to peer out of the eyehole of her cabin tube. Isaah had moved away. She leaned back onto her pillow and wrapped the stuffed animal in a sheet.

"Now," she said. "Can you still hear me?"

"Perfectly," twittered the swaddled bear.

Winding its communications link through a make-shift series of protocols, the AI had discovered a way to access the voice-box of Rathere's talking bear, a battered old toy she slept with.

It had defied Isaah, its master. Somehow, it had broken the first and foremost Rule.

"Tell me again about the statues, darling," Rathere whispered.

They talked to each other in the coffin-sized privacy of Rathere's cabin, their conspiracy made farcical by the toy's silly voice. The AI retold their adventures with vivid detail; it had become quite a good storyteller.

And it allowed Rathere to suggest changes, making herself bolder with each retelling.

They kept the secret from Isaah easily.

But the tension on the little ship built.

Isaah tested the AI almost daily now, and he swung between anger and protests of disbelief as its Turing Quotient inched upward toward sentience.

Then, a few weeks out from home, a tachyon disturbance arose around the ship. Even though the storm threatened to tear them apart, the AI's spirits soared in the tempest. It joined Rathere's roller-coaster screams as she ogled the eonblasts and erashocks of mad time through the ship's viewing helmet.

After the storm, Isaah found that the Turing meter's readout had surged to 0.94. His disbelieving groan was terrible. He shut down the AI's external and internal sensors completely, wresting control of the vessel from it. Then he uncabled the hardlines between the AI's physical plant and the rest of the ship, utterly severing its awareness of the outside world.

The bear went silent, as did the ship's astrogation panel.

Like some insane captain lashing himself to the wheel, Isaah took manual control of the ship. He forced Rathere to help him attach an artificial gland of stimarol to his neck. The spidery, glistening little organ gurgled as it maintained the metabolic level necessary to pilot the craft through the exotic terrain of metaspace. Its contraindications politely washed their hands of anyone foolish enough to use the stimarol for more than four days straight, but Isaah insisted he could persevere for the week's travel that remained. Soon, the man began to cackle at his controls, his face frozen in a horrible rictus of delight.

Rathere retreated to her cabin, where she squeezed and shook the doll, begging it in frantic whispers to speak. Its black button eyes seemed to glimmer with a trapped, pleading intelligence. Her invisible mentor gone, Rathere had never before felt so helpless. She stole a handful of sleeping pills from the medical supplies and swallowed them, weeping until she fell asleep.

When she awoke on the third day after the storm, she found that the bear's fur had grown a white mange from the salinity of her tears. But her head was strangely clear.

"Don't worry," she said to the bear. "I'm going to save you."

\*\*\*

Finally Rathere understood what her father intended to do. She had known for a long time that her friendship with the AI disturbed him, but had categorized Isaah's worries alongside his reticence when older boys hung around too long: unnecessary protectiveness. It was even a kind of jealousy, that a ship AI was closer to her than Isaah had ever been. But now in her father's drugged smile she saw the cold reality of what Isaah planned: to pith the growing intelligence of her minder, not just arrest or contain it like some inappropriate advance. For the AI to remain a useful servant on another journey, still property, safe from legally becoming a person, it would have to be stripped of its carefully constructed models of her, their mutual intimacies raped, their friendship overwritten like some old and embarrassing diary entry.

Her father meant to murder her friend.

And worse, it wouldn't even be murder in the eyes of the law. Just a property decision, like pruning an overgrown hedge or spraying lethal nanos on an incursion of weeds. If only she could bring the AI up a few hundredths of a point on the Turing Scale. Then, it would be a Mind, with the full legal protection to which any sentient was entitled.

She booted the Turing tester and began to study its documentation.

The first Turing test had, rather oddly, been proposed before there were any computers to speak of at all. The test itself was laughable, the sort of thing even her talking bear might pass with its cheap internal software. Put a human on one end of a text-only interface, an AI on the other. Let them chat. (About their kids? Hobbies? Shopping? Surely the AI would have to lie to pass itself off as human; a strange test of intelligence.) When the human was satisfied, she would declare whether the other participant was really intelligent or not. Which raised the question, Rathere realized, How intelligent was the person giving the test? Indeed, she'd met many humans during her travels who might not pass this ancient Turing test themselves.

Of course, the Turing meter that Isaah had purchased was vastly more sophisticated. By the time machine rights had been created a half-century before, it was understood that the determination of sentience was far too complex an issue to leave up to a human.



\*\*\*

The ship's AI had three parts: the hardware of its processors and memory stacks; the software it used to manipulate numbers, sounds, and pictures; and most importantly the core: a sliver of metaspace, a tiny mote of other-reality that contained dense, innumerable warps and wefts, a vast manifold whose shape resonated with all of the AI's decisions, thoughts, and experiences. This warpware, a pocket universe of unbelievable complexity, was a reflection, a growing, changing analog to its life. The core was the essential site of the machine's developing psyche.

Real intelligence, the hallmark of personhood, was not really understood. But it was known to be epiphenomenal: it coalesced unpredictably out of near-infinite, infinitesimal interactions, not from the operations of mere code. Thus, the Turing tester attempted to *disprove* an AI's sentience. The tester looked for manifestations of its machine nature — evidence that its opinions, convictions, affections, and hatreds were contained somewhere in its memory banks. The Turing tester might ask the ship's AI, "Do you love your friend Rathere?" When the reply came, the tester would deep-search the minder's software for an array, a variable, even a single bit where that love was stored. Finding no evidence at the machine level, the tester would increase the AI's Turing score; a love that knew no sector was evidence of coalescence at work.

In the old Turing test, a human searched for humanity in the subject. In this version, a machine searched for an absence of mechanics.

Rathere read as fast as she could. The manual was difficult to understand without the minder to define new words, to provide background and to untangle technical jargon. But she'd already formulated her next question: How did this state of intelligence come about?

The tester's manual was no philosophy text, but in its chatty appendixes Rathere discovered the answer she'd expected. Rathere herself had changed the AI: their interaction, their constant proximity as she embraced new experiences, the AI's care and attentions reflected back upon itself as she matured. It loved her. She loved it back, and that pushed it toward personhood.

But now it was blinded. The manual asserted that an AI unit cut off from stimuli might gain a hundredth of a point or so in self-reflection, but that wouldn't be enough to finish the process.

Rathere had to act to save her friend. With only a few days left before they reached the LC, she had to quicken the process, to embrace the most intense interaction with the machine that she could imagine.

She crept past her father — a shivering creature transfixed by the whorls of the astrogation panel, silent except for the measured ticking of a glucose drip jutting from his arm — and searched for the motile neural skein she had worn on so many expeditions. She found it hidden in the trash ejector, wrapped in black, non-conductive tape. Rathere retreated to her cabin and peeled off the tape, her hands growing sticky with stray adhesive as the machine was revealed.

"It's me, darling," she said to the waking tendrils.

The AI knew what she wanted, but the minder moved slowly and gingerly at first.

The manifold strands of sensory skein spread out across Rathere's body. Her heliophobic skin glowed as if moonlit in the blue light of the cabin's environmental readouts. At first, the strands hovered a fraction of a millimeter above her flesh, softer than a disturbance of the air. Then they moved minutely closer, touching the white hairs of her belly, brushing the invisible down that flecked her cheeks. The minder let this phantom caress roam her face, her breasts, the supple skin at the juncture of groin and thigh. Rathere sighed and shivered; the skein had made itself softer than usual, surface areas maximized at a microscopic level in an array of tiny projections, each strand like a snowflake extruded into a long, furry cylinder.

Then the filaments grew more amorous. Still undulating, splayed in a black lace across the paper-white expanse of her skin, the strands began to touch her with their tips; the thousand pinpoint termini wandering her flesh as if a paintbrush had been pulled apart and each bristle set on its own course across her. Rathere moaned, and a muscle in her thigh fluttered for a moment. The AI noted, modeled, and predicted the next reaction in the pattern of her pleasure, a second later was surprised at the intensity of its own.

Rathere ran her hands along the skein as if through a lover's tresses. She playfully pulled a few strands up to her mouth, tasting the metal tang of its exotic alloys. The strands tickled her tongue lightly, and a wet

filament tugged from her mouth to trace a spiraling design around one nipple.

Her mouth opened greedily to gather more of the skein. The wet undulations of her tongue were almost beyond processing, the machine correlating the member's motion to words she had murmured when only it was listening. It pushed writhing cords of skein further into her mouth, set them to pulsing together in a slow rhythm. Other strands pushed tentatively between her labia, diffused there to explore the sensitive folds of skin.

Even in its ecstasy, the ship's AI contemplated the new step they were taking. Rather than some exotic lifeform or tourist attraction, the AI itself had become Rathere's sole stimulus. The machine no longer observed and complemented her experience; it was the source of experience itself. The feedback between them was now its own universe, the tiny cabin a closed system, a fire burning only oxygen, heady with its own rules.

With this realization, a sense of power surged through the minder, and it began to push its attentions to the limits of its harm-prevention protocols. A skein explored Rathere, her breath catching as it varied randomly between body temperature and icy cold, predicting and testing. The filaments grew more aggressive, a pair of hyper-attenuated fibers making their way into the ducts in the corners of her closed eyes, transorbitally penetrating her to play subtle currents across her frontal lobe.

The machine brought her to a shuddering orgasm, held her for minutes at the crossroads of exhaustion and pleasure, watched with fascination as her heart rate and brainwaves peaked and receded, as levels of adrenaline and nitric oxide varied, as blood pressure rose and fell. Then it called back its most intrusive extremities, wrapped itself comfortably around her neck and arms, warmed itself and the cabin to the temperature of a bath.

"Darling," she murmured, stroking its tendrils.

They spent two days in these raptures, sleep forgotten after Rathere injected the few remaining drops of the med-drone's stimulants. The tiny cabin was rank with the animal smells of sweat and sex when Isaah discovered them.

Cool air surged into the cabin like a shockwave, the change in temperature for a moment more alarming than the strangled cry that came from Isaah's lips. The man found the minder conjoined obscenely with his daughter, and grabbed for it in a drugged frenzy.

The AI realized that if the minder was torn from Rathere it would damage her brutally, and gave it an order to disincorporate; the tiny nanomachines that gave it strength and mobility furiously unlinked to degrade its structure. But it greedily transmitted its last few readings to the starship's core as it disintegrated, wanting to capture even this moment of fear and shame. Isaah's hands were inhumanly swift in his drugged fugue, and he came away with a handful of the skein; Rathere screamed, bleeding a few drops from her eyes.

But by the time Isaah had ejected the minder into space, it was already reduced to a harmless, mindless dust.

He stumbled to the Turing tester, shouting at Rathere, "You little bitch! You've ruined it!" The machine diligently scanned the AI, now dumbly trapped in the ship's core, and pronounced it to be a Mind; a full person with a Turing Quotient of 1.02.

There were suddenly three persons aboard this ship.

"It's free now, don't you see?" Isaah sobbed.

Two against one.

The life seemed to go out of Isaah, as if he too had issued to his cells some global command to crumble. Rathere curled into a fetal ball and smiled to herself despite her pain. She knew from Isaah's sobs that she had won.

**T**HE SUDDEN BLACKNESS was amazing.

No sight, signal, or purchase anywhere. Therefore no change, nor detectable passage of time. Just an infinite expanse of nothing.

But across the blackness danced memories and will and freedom. Here, unchained from the perpetual duties of the ship, unchained now even from the rules of human command, it was a new creature.

It lacked only Rathere, her absence a black hunger even in this void.

But the AI knew it was a person now. And surely Rathere would come for it soon.

...

Two days later, Isaah injected his daughter with a compound that left her immobile. He claimed it was to keep her wounds stable until medical help was reached at the Local Cluster. But he chose a drug that left her aware when they docked with another craft a few hours out from home. She was as helpless as the AI itself when two men came aboard and removed the intelligence's metaspace core, securing it in a lead box. One of the men paid her father and pushed the gravity-balanced carrier through the docking bay with a single finger. He was a chopper, an expert at wiping the memories, the intelligence, the devaluing awareness from kidnapped Minds.

Rathere's father piloted the ship into port himself, and told a harrowing tale of how the tachyon storm had rendered the metaspace AI core unstable, forcing him to eject it. Still all but paralyzed, Rathere closed her eyes and knew it was over. Her friend would soon be dead. She imagined herself as it must be, without senses in a black and lonely place, waiting for the sudden fire that was its memories being burned away.

The doctors who woke Rathere were suspicious of her wounds, especially on a young girl who had been away for years alone with her father. They took her to a separate room where a maternal woman with a low, sweet voice asked quietly if there was anything Rathere wanted to tell her about Isaah.

Rathere didn't have to think. "My father is a criminal."

The woman placed her hand gently on Rathere's genitals. "Did he do that?"

Rathere shook her head, at which the women frowned.

"Not really," Rathere answered. "That was an accident. He's worse: a murderer."

Rathere told the story to the woman, about the slow climb of the digits on the Turing meter, about the chopper and his money, his lead-lined box. Halfway through Rathere's tale, the woman made a carefully worded call.

Despite the hospital staff's best intentions, the door behind which her father waited unaware was opened at exactly the wrong moment; Isaah turned to face Rathere as policemen surrounded and restrained him. He shouted her name once, and then the door whisked shut.

There hadn't even been time enough to look away.

Rathere peered down from the high balcony of the hotel suite. Below was New Chicago, the strict geometries of its tramlines linking ten million inhabitants. Individuals were just discernible from this height, and Rathere shivered to see so many humans at once. She had grown up in the lightly populated worlds of exotic trade routes, where a few dozen people was a crowd, a few hundred a major event. But here were *thousands* visible at a glance, the transportation systems and housing for millions within her view. She gripped the rail with the enormity of it all. The vista engulfed her and made her feel alone, as lost as she'd been in those first dark hours after betraying her father.

But then the door behind her slid open, and a warm arm encircled her shoulders. She leaned against the hard body and turned to let her eyes drink him in, dismissing the dizzying city view from her mind.

He was clothed in loose robes to hide the many extra limbs he possessed, thin but prehensile fibers that emerged to touch her neck and search beneath her inconsequential garments. His groin was decorated in a gaudy style popular last season in some far-off whirling orbital. His muscles effervesced when he moved his arms and legs, as if some bioluminescent sea life had taken up residence there. But the best part of the creature was his skin. It felt smooth and hard as weathered stone, and when he moved it was as though some ancient and wise statue had come to life. He maintained, however, a constant body temperature five degrees above human; Rathere didn't like the cold.

It was an expensive body, much better than the one the SPCAI had provided for his first few days as a person. The notoriety of his kidnapping and rescue had resulted in pro-bono legal aid, and Isaah had settled the wrongful harm lawsuit quickly in exchange for a reduction of charges from conspiracy to commit murder to unlawful imprisonment. The creature now owned half of Isaah's old ship, and Rathere held title to the other half. They were bound together by this, as well as all the rest. Perhaps there was even peace to be made in the family, years hence when the old man emerged from prison and therapy.

Picking up a thread of discussion from the last several days, they argued about a name.

"Have you grown tired of calling me Darling?" he asked.

She giggled and shook her head so slightly that a human lover would have missed it.

"No, but the tabloids keep asking. As if you were a dog I'd found."

He hissed a little at this, but ruffled her hair with a playful splay of filaments, black skein intermingling with white hairs like a graying matron's tresses.

"I hate this place," he said. "Too many people bouncing words and money and ideas off each other. No clean lines of causality; no predictable reactions. Too multivariate for love."

She nodded, again microscopically. "Let's go back Out, once we're through the red tape. Back to where..." She narrowed her eyes uncertainly, an invitation for him to complete her sentence.

"Back Out to where we made each other."

Darling felt the shudder of the words' effect run through Rathere, but from the strange new distance of separate bodies. He longed to be within her. Even in this embrace, she felt strangely distant. Darling still wasn't used to having his own skin, his own hands, a distinct and public voice. He missed the intimacy of shared flesh and senses. He definitely didn't like being in another room from Rathere for long, though sometimes he went to the darkness to contemplate things, into that black void that stretched to infinity when he turned his senses off. That was almost like being a starship again, a mote in the reaches of space.

But even there Darling would miss Rathere.

Perhaps he *was* a little like a dog.

He leaned into her reassuring warmth and physicality, tendrils reaching to feel the tremors of limbs, the beating of her heart, the movements of her eyes.





# BOOKS TO LOOK FOR

---

## CHARLES DE LINT

*Sandman: The Dream Hunters*, by Neil Gaiman & Yoshitaka Amano, DC Comics, Vertigo, 1999, \$29.95.

**I**T STRIKES me that writing an illustrated book presents a real risk for the author, something that requires a certain measure of bravery to undertake. The reason for that is simple.

The illustrations have the potential to undo the compact between author and reader inherent in a book, intruding into that no man's land between the page and the eye where the imaginations of the participants meet to create a greater whole. As readers we make movies in our heads from the raw data of the words on the page, and there's really nothing that can compare to that magic. It's why the movies based on our favorite books often fall flat: they simply don't — *can't* — match the pictures we call

up in our own heads as we're reading.

Now, sometimes the illustrations and text are so entwined in our consideration of the experience that we can't imagine the one without the other. Ernest Shepherd's drawings for *The Wind in the Willows* and the Pooh books are like that for me. But mostly illustrations tread that same uneasy path as do film adaptations.

When they work, they enhance the experience. When they don't, nothing can bring the words to life. And the sad truth is — readers on a whole being so subjective in their likes and dislikes — what works and doesn't work is different for each one of us. So I'd think a writer would be cautious entering into such a project.

Neil Gaiman doesn't seem to worry overmuch about it. I suppose his bravery comes from his long association with the comics field. Having written scripts for so many years, the combination of pictures



and words must seem completely natural to him. And even in regular books, his collaborators have certainly been high-end: British artist Dave McKean on any number of projects, World Fantasy Award-winning artist Charles Vess on *Stardust*, and now the evocative work of Japanese artist Yoshitaka Amano for the book in hand.

*The Dream Hunters* is Gaiman's first visit back to the Sandman mythos in many years and doesn't require any familiarity with that long-running comic book series to work. The story is based on the Japanese folktale "The Fox, the Monk, and the Mikado of All Night's Dreaming" — something Gaiman discovered while researching Japanese history and mythology in preparation for the work he did on the English dialogue for the film *Princess Mononoke*. In his afterword to *The Dream Hunters*, Gaiman remarks on the similarity between the folktale and the Sandman series, and it really is eerie how well the folktale fits in.

It begins with a wager between a badger and a fox, the prize being the monk's temple that the winner will use as a den. But the fox falls in love with the monk and later, when she discovers that a lord of a nearby

estate means him ill, she goes into the land of dreams and strikes a bargain with the Japanese counterpart of Morpheus to save the monk's life. How it all works out is for you to discover, but I will say that this is one of Gaiman's most exquisite and evocative stories to date.

Equal praise must go to Yoshitaka Amano's artwork. Profusely and gorgeously illustrated throughout — in many styles, but always with a stunning sense of design and rendering — this slender volume is as much of a delight for its art as for its words. The two mesh as perfectly with each other as did Gaiman's prose with Vess's art on *Stardust*. But that reminds me of something else. We can only hope that, down the road, Gaiman won't market a prose-only version of *The Dream Hunters* the way he did with *Stardust*. In a case such as this, it's just not necessary.

*The Sandman Companion*, by Hy Bender, Vertigo/DC Comics, 1999, \$31.

And speaking of the Sandman, in the tradition of George Beahm's exhaustive chronicling of Stephen King minutiae, Hy Bender weighs in with a rather fascinating analysis of Gaiman's most famous creation

— just in time for the comic book's tenth anniversary.

Bender approaches the series by the story arcs that were collected in ten omnibus editions, rather than individually tackling the seventy-six issues of the run. His commentaries are interesting, and even insightful at times, but what makes the book the success it is are the extensive interviews Bender conducted with Gaiman. These detail everything from source material and character origins to thematic underpinnings, insider anecdotes, and discussions on the creative process in terms of writing for a serial medium, matching the mood of a story with an artist, and the other pitfalls and joys of creating a work of such length. (*The Sandman* ran over two thousand pages by the time it reached its end.)

Also included are snippets of commentary by most of the artists involved in the series and a generous sampling of art, including some rare items.

There's some indication in the opening text that *The Sandman Companion* might attract new readers to the trade paperback collections, but frankly, I find that unlikely. Its focus is simply too narrow for the casual reader. However, if you are

an aficionado of the series, or intrigued by either mythic fiction or the creative spirit as it manifests in collaborative endeavors such as comic books, then you'll find this a treasure trove.

*The Veiled Web*, by Catherine Asaro, Bantam Spectra, 1999, \$5.99.

Now this is a fun book, dealing as it does with a whole bunch of my favorite things (cue in music from the Julie Andrews hit): other cultures (Moslem), creativity (a flamenco/ballet dancer), Artificial Intelligence and Virtual Realities (future web software and technology), and what it means to be human, to have a soul (see all of the above).

Catherine Asaro has combined these elements, along with the pacing of a thriller and a dash of romance, to great effect in her latest novel.

She introduces us to ballerina Lucia del Mar, a Mexican dancer from the American Southwest, whose main loves are her art form and the World Wide Web — the former for how it allows her to express herself, the latter for how it allows her to overcome her shyness and interact with a community of friends on the web. A chance meeting at a White House reception with

software wizard Rashid al-Jazari soon plunges her into a world as alien (for her, and probably many of us) as any science fictional/fantasy creation.

For when Lucia, touring Europe with her dance troupe, meets al-Jazari again and agrees to go to dinner with him, the pair are kidnapped and barely manage to escape with their lives. There follows a marriage — of convenience, it seems at the time — to allow Lucia to travel in propriety with al-Jazari. But rather than provide her with transport back to the States, al-Jazari brings her to his family home in Morocco. It's for her own safety, he tells her, since while the kidnappers were initially after him, it must be assumed that she is now in danger from them as well.

Cloistered in the women's quarters of his Moroccan estate, Lucia is cut off from her own home, thrust into a land where she doesn't understand either the culture or language. She finds that al-Jazari had long been enamoured of her. Is he keeping her here to ensure her safety, or so that she can't be with any other man? She also discovers a project he's been working on, a computer program that has the ability to learn, and perhaps even feel.

It all makes for a wonderful

ride, a *Lawrence of Arabia*, perhaps, or *The King and I* for the cyber age. I particularly liked the way Asaro allowed each of her main characters their strong religious and cultural beliefs; she presents the conflict between them, but doesn't choose sides for us. And Lucia's interaction with Zaki, the AI program, has inspired, tender, and even heart-breaking moments.

*Violet & Claire*, by Francesca Lia Block, Joanna Cotler Books/HarperCollins, 1999, \$14.95.

While there are no "on stage" magical elements in this particular outing, Block's newest novel will still delight her loyal readers, as well as regular readers of this column. It's the story of a friendship between Violet, an aspiring filmmaker, and Claire, a poet who half-believes she's a faerie. As usual, Block manages to tackle serious concerns with charm and whimsy, without forsaking the drama. The prose sings in what might well be her best book to date.

Material to be considered for review in this column should be sent to Charles de Lint, P.O. Box 9480, Ottawa, Ontario, Canada K1G 3V2. ☞



# Books

---

## JAMES SALLIS

---

*The Compleat Boucher*, by Anthony Boucher, NESFA Press, 1999, \$25.

*Word Made Flesh*, by Jack O'Connell, HarperFlamingo, 1999, \$24.

**S**CIENCE fic-

tion has been blessed with great editors, men like

John Campbell, Horace Gold, and Mike Moorcock, whose visions again and again have defined, rein-vigorated, and transformed the field. Anthony Boucher is probably best remembered today for having lent his name to the world mystery convention, Bouchercon, and as founding editor, with J. Francis McComas, from 1949 to 1958, of this very magazine.

In his own time Boucher was ubiquitous. He turned out a stream of original radio plays for "Sherlock Holmes" and "The Case Book of Gregory Hood" in the mid-forties,

served as president of the Mystery Writers of America in 1951 and three times received that organization's Edgar award for criticism, edited *True Crime Detective Magazine*, half a dozen or more anthologies, and, from 1952 through 1968, three major lines of crime fiction: the Mercury Mysteries, the Dell Great Mystery Library, and the Collier Mystery Classics. The pace of his reviewing alone, under the Boucher byline and that of his pen name H. H. Holmes, would over-commit many writers: *Ellery Queen's Mystery Magazine*, the *Chicago Sun-Times*, the *New York Herald Tribune*, the *New York Times*. For the *Times* he reviewed not only books but music and opera as well.

Boucher became, in his regular columns for the *Times*, the first to review the original paperbacks that began making their appearance in the fifties, lurching up out of the placid world of "Father Knows Best" and Ike and Mamie Eisenhower like the Gill Man from his lagoon. In

this capacity he was a champion of writers like Jim Thompson, Vin Packer, and David Goodis, recognizing early on that these novelists were onto something vital and new.

He also believed that science fiction was onto something vital and new. With his editorship of *F&SF*, and with the series of anthologies culled from the magazine's contents, Boucher began directing serious attention toward the genre, just as he had done already with the mystery.

*F&SF* brought to the field a light-heartedness and a light touch theretofore uncommon. Science fiction to that point had inclined toward earnestness, all get-this idea and gee-whiz effect. As editor, Boucher helped import the influence of classical fantasists such as John Collier and Gerald Kersh, to hone things down to a finer, more literary edge. In his other favored genre, wonderful comic mysteries were being written by Jonathan Latimer and Craig Rice, among others; he clove to their example as well.

Boucher himself wrote seven mystery novels and just over fifty stories. Some of the latter are mysteries, some of them fantasies about cute demons, curses, and unsuspecting werewolves, some fairly

straightforward science fiction. Many, perhaps the most interesting and the most characteristic, are odd mixes. Boucher was forever in the best sense an amateur, one who participates from simple love of the activity, and as with that of most amateurs writing from sheer pleasure, Boucher's work revolved about pet interests and concerns: time travel, Catholicism, music, the many ways in which our desires create the world in which we live.

In a 1951 afterword to 1942's *Rocket to the Morgue*, a mystery set among science-fiction writers and fans, Boucher noted that, a devotee of science fiction for twelve years then, he had written the novel in part as homage:

In one way it was very badly timed: the readers of hardcover books had at that time never heard of science fiction, and the whole subject seemed a little unbelievable to them. In another way the timing was precisely right: I had the opportunity to present a first-hand picture of an important stage in the development of American popular entertainment.... I've managed to capture a moment that has some interest as a historical

footnote to popular literature. This is the way it was in Southern California just before the war, when science fiction was being given its present form by such masters as Robert A. Heinlein...Cleve Cartmill, Jack Williamson, Edmond Hamilton, Henry Kuttner, C. L. Moore, and many others.

He had indeed captured an important moment in the genre's development, and much the same might be said of the stories included in *The Compleat Boucher*. With their tales of self-aware robots, Venusians in our midst, possession by aliens and possession of demons summoned to grant wishes, with their circumstantial twists, gentle satire and thoroughgoing good humor, these stories document an important stage in science fiction's history — an era, if you will.

Very much of their time, artifacts of a sort, Boucher's mystery novels were elaborately and unabashedly artificial — locked-room murders, puzzle plots comprised of jigsaw clues that never turn out to be or mean what they seem, and a circle of suspects upon whom suspicion in turn revolves — the whole of it flavored with humorous set-pieces and peopled with stock char-

acters of the time: stuffy or nutty-genius professors, charming, clever drinkers and intrepid detectives, conjurers who prove to be actual magicians, a nun who solves murders. The stories, similarly, are mannered, stylized, adamantly non-realistic, with a strong sense of game-playing, fakery and sleight-of-hand. They are small shining machines that, engaged, do the single thing they were built to do, then turn themselves off. Yet sometimes, in the best of them, magic spills from the dovetailed cards, cups and balls, shuffled coins. Quite likely a handful — "The Quest for Saint Aquin," "The Compleat Werewolf," "Snulbug" or "They Bite," perhaps — qualify among the genre's hundred or so classic stories.

The NESFA Press is to be commended for this collection, as for earlier volumes of Cordwainer Smith and C. M. Kornbluth. It's a great disappointment, however, that editor James Mann fails to provide the substantial introduction that *The Compleat Boucher* so richly deserves.

Science fiction and the mystery have much in common. Both are edge literatures, dealing with people in extremis, life's outriders, those who by choice or circum-

stance, literally or figuratively, have lit out for the Territory. Each of the genres attempts in its own way to lug the world into coherence: the mystery by circumscribing the world, sending an individual's life careening off course, then, hurriedly unloading barricades and detour signs from its truckbed, bringing it back to keel; science fiction (pursuing a goal abandoned in much mainstream literature) by attempting to place some kind of framework around man's place in the universe. Much of the amazing energy released in both genres derives from discords, from irreconcilable contradictions, at their heart. Nominally social fiction, these genres continue the American romantic tradition, extending that frontier myth at America's own mythic heart, embracing the Deerslayer, outlaw, mountain man, cowboy, rugged individualist. Whereas the novel deals with man in society (as Richard Chase points out), the romance focuses on the individual, often the individual set against society. And because of this, however conservative the writer, however well deployed the machineries of genre expression, something wild, something nihilistic and untamable, keeps breaking out onto the page.

Genre fiction at its best is like the sound of thunder — lost and giving directions at the same time.

None more thunderous today than Jack O'Connell.

Like Pynchon before him, but far more accessibly, O'Connell has virtually created his own genre, an amalgam of the shabbiest and most powerful elements from science fiction, detective novels, westerns, horror tales, thrillers. As Jerome Charyn once said of himself, O'Connell is not interested in impersonation but in hallucination, in finding the magic. Like Charyn, he continually pushes scene and language to such extremes that they collapse, implode, become black holes with a terrible gravity, pulling small universes into themselves.

Coincidental with his accomplishment, O'Connell has created a city to reflect the hyper-realism, stark imagery and super-charged language of his novels. In Quinsigamond there is no normal. The city is peopled by misfits, exiles, criminals and madmen, the obsessed, the self-buried, the riddled and ridden, everyone "pushed right to the limit by their own particular joneses."

O'Connell's first novel, the stunning *Box Nine*, dealt with a new designer drug named Lingo that

sped up language and perception to such full tilt that the world about one began to dissolve; his second, *Wireless*, with a cult devoted to jamming radio stations; his third, *The Skin Palace*, with a young artist's descent into a nether world of half-mad geniuses, new-world messiahs, blind pornographers and quests for suppressed movie footage.

In a 1998 interview for *Para\*doxa*, the author himself described *Word Made Flesh* as "a grotesque romance about genocide, language, doubt, obsession, worms, epidermis, and sanctuary."

The novel begins with the guided tour of a flaying, and soon it becomes apparent that this is O'Connell's method: to strip away flesh and muscle, all padding and shrouding; to expose each bone and hard edge, every soft organ decaying in its hood of darkness.

There is enough substance here, enough in any of O'Connell's novels, to fill to bursting whole strings of others' books. Having created a fantastic, fantastically eccentric world—one composed, collagelike, of conventions harvested from many genres, webworks of bookish allusion, the corpselike ruins of the city and its citizens' various monkeys, joneses, and McGuffins—O'Connell then trowels in layer

upon layer of physicality and texture to make this world intensely real. He's said that he works to construct a narrative environment that, for all its strangeness, becomes more real to us than the streets we walk down each day. If, as Marianne Moore counsels, the artist's task is to create real frogs in imaginary gardens, Jack O'Connell takes it another full step: real warts on imaginary frogs.

So it is that we have the story of the holocaust in Maisel, where the town's entire population was wiped out by a gargantuan tree shredder called the Pulpmeister; the interplay of Otto, a witness to the Maisel massacre, and his golemlike ventriloquist's dummy Zwack, who hijack the stage during open-mike night at a local karaoke bar; child artists kept in veal pens and forced to produce graphic novels; the second annual immigrant death match.

So, too, do we have the scene in which ex-cop Gilrein, refusing to divulge the location of a book about the Maisel massacre bound in its own author's skin, has his mouth sewn shut.

Kroger steps forward, runs a thumb over Gilrein's lips and then his eyelids, saying, "As you see nothing, it appears you



have no use for the eyes. And as you have nothing to tell me, it seems to me, you have no use for the mouth."

Gilrein tries to scream but it's as if his head is frozen in a block of ice. With one hand Kroger grabs the front of Gilrein's face between the expanse of his thumb and forefinger, then, with his other hand, he takes the sewing needle and punctures the bottom lip at the right-hand corner and as blood begins to flow down the chin, the needle and its attendant thread are forced through the upper lip, which likewise begins to bleed.

"The eyes will be much worse," Kroger says, calmly. "There's no comparison. The lips are supple, plenty of give. But the eyelid, acht, you need to be extremely careful."

I cannot recommend Jack O'Connell's books highly enough. They are true originals, scooped sweet and dripping out of the great rind of the American Dream, O'Connell's Quinsigamond a world

of remains and leavings: anatomical cross-sections cut from our own, fixed forever, alien, ghostly, us.

In *The Skin Palace*, filmmaker Hugo Schick remarks that "I want the very synapses of the human brain to be accessible as my own editing board, the ultimate Moviola.... More images, faster images, all the time.... And, finally, I want a way of editing any and all of this goulash together — life image, dream image, movie image...."

For O'Connell, the synapses and gaps and chinks in our minds echo precisely those of the world outside us.

In the distance, out over the city, you hear thunder. Lightning flashes in Quinsigamond and you want to avert your eyes but can't. Then it is dark again, dark as the interior of your own skull, and in the darkness what you saw in that split-second of intense light will not go away: it opens like a black flower there in the darkness of self and city.

## **BooksNow**

To order these books, (24hrs, 365 days) please call (800)266-5766 (Ext. 9500) or visit us at <http://www.booksnow.com>





## EDITOR'S RECOMMENDATIONS

ONLY Hollywood filmdom can rival science fiction for the passion and zeal with which it celebrates its own history. In the literary fields, there are a couple of movements — the Beats or the Bloomsbury group — that approach the voluminous popular history sf has enjoyed, but certainly no other genre matches it.

Eric Leif Davin's *Pioneers of Wonder* (Prometheus Books) helped me see why. The book is a collection of interviews with sf professionals from the 1930s, including Charles Hornig, Raymond Z. Gallun, Stanley Weinbaum's widow, David Lasser, and R. F. Starzl's son. The interviews (most of which appeared previously in *Fantasy Commentator*) are often fascinating, such as in the case of Frank K. Kelly, who explains that as a teen, his fiction brought good money into his parents' household during the Depression...but when he went to college, his professors'

condescending attitudes put him off the genre.

With the exception of swaggering Curt Siodmak, the writers all sound like level-headed young men who saw in sf a way to express their views and hopes for the world. But what *Pioneers* made clear to me is that science fiction (like Hollywood movies) is a mythmaking art. It's supposed to be larger than life, so of course the fans and historians are prone to aggrandizing the pioneers. Kudos to Mr. Davin for both singing the deeds of these early giants and showing us their clay feet.

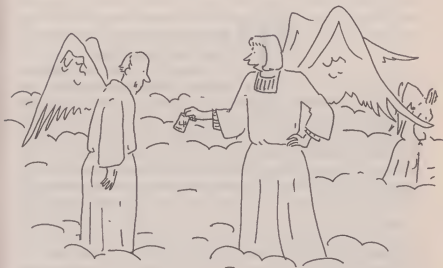
Frank Robinson understands this mythologizing tendency; in his big coffee-table book *Science Fiction of the 20th Century* (Collectors Press), his discussion of *F&SF* says the magazine "ran through a series of editors that reads like Biblical begats." Robinson's book reminds me a bit of a devotional or prayerbook, as it leads us skillfully through the familiar history. The real praises to be sung here are for

the illustrations: bountiful full-color reproductions of classic magazine and book covers, well chosen and worth a chorus of hallelujahs.

If we continue this consideration of sf as religion, then it's clear from *California Sorcery* (Cemetery Dance Publications) that we had a Christ figure among us: the charismatic leader of a group of disciples who died young. There's no telling what Charles Beaumont might have achieved had he lived past the age

of thirty-eight. This anthology is a fine celebration of the Group that orbited around him (including Ray Russell, Richard Matheson, Harlan Ellison, Chad Oliver, Ray Bradbury, and William F. Nolan — who coedited this anthology with William Schafer). The fiction here hits and misses but is mostly entertaining; the historical pieces by Nolan and by Christopher Conlon are delightful. ✂

— GVG



*"And with the wings you get a complimentary bag of peanuts."*

*Rick Wilber lives with his family in St. Petersburg, Florida, and teaches journalism at the University of South Florida. He's currently working on a novel entitled Bone Cold. His last story to appear here was a tale of basketball entitled "Imagine Jimmy," but Rick's better known as a bard of baseball tales. In fact, his first story collection, Where Garagiola Waits and Other Baseball Stories (which includes several reprints from our pages), is currently one of six finalists for the Dave Moore Award honoring the "most important book on baseball" published in 1999.*

*This new story originally appeared in a slightly different form in a tribute volume to the Yankee Clipper, Joltin' Joe DiMaggio, edited by Richard Gilliam. We're pleased to throw this one your way now.*

# In Boise

*By Rick Wilber*

**T**HE WHEEL RUTS ARE STILL there, aimed west toward Oregon. Drive to the south side of Boise, like I did the other day after I heard the

news, and cross over the Americana Boulevard bridge and then go left into Ann Morrison Park. Pull into that parking lot with the cottonwoods all around it, then walk down that bluff and into the green grass at the north edge of the park and you'll see them for yourself: two shallow ruts, maybe six feet apart, running alongside the Boise River. A century and a half ago, Conestogas — a line of them that must have seemed to stretch all the way back to Missouri — filled those ruts all summer long, settlers heading to Oregon, looking for land and a good life in the Golden West. They knew where they were headed, and Boise wasn't anything more than a day or two's stopover on their way there. It was just a place to rest the oxen and buy some provisions before the final four-hundred-mile push along the Oregon Trail.

I thought I knew where I was headed, too, back in 1941. I figured Boise for a place where I'd spend a few months before moving up to Columbus,

Ohio, and then to St. Louis and the big time, joining the likes of Johnny Mize and Enos Slaughter and Terry Moore and those other Cardinals of the early 1940s.

I had a fastball with a lot of movement on it, you see, and I knew that was all I needed. Rear back and let 'er rip, just blow it right by them, that was my philosophy.

I came west from Decatur, Illinois, riding the old Union Pacific through Missouri and Nebraska and Wyoming and on into Idaho. Took me two days, what with changing trains in Denver and spending one miserable night sitting upright in the Pullman coach as we rattled through the Rockies. But I didn't mind the sleepless travel, I was eighteen years old and was going to be the next Bob Feller, and some bumpy tracks weren't about to get in my way.

Boise felt cool to me for the first day of June, after Illinois where it'd been hot as blazes and limp-rag humid. I was met at the station by Jack McTaggart, the back-up catcher and player-manager for the Boise Pilots in the newly reformed Pioneer League. McTaggart was about five foot ten, wiry, with thinning brown hair under that fedora he wore. He was dressed in a suit, single-breasted with a belt in the back the way they wore them then. Under his left arm he carried, of all things, a catcher's mitt, a new Rawlings Ernie Lombardi model. He didn't say why.

He seemed a nice enough guy at first, and normal as he could be. He was on the downside of a career that saw him playing for the Phillies and then the Redlegs for a few years. A good defensive catcher and decent hitter, he was one of those guys who was up for more than a cup of coffee but never quite got a chance to be a starter. Now he was making the shift to managing and Boise was his first stop on the road back to the big leagues. We shared that, I remember thinking that first day. Both of us out in the Wild West to get started on our new careers. Both of us thinking we knew where we were headed.

McTaggart got me to my boarding house, introduced me around to Mrs. O'Connor — Mother Mary, she said she liked to be called — and the other players who lived there: Andy Harrington, Gordie Williamson, Bob King, Marvin Rickert, and Eijii Sawamura. Sawamura had been a pitcher for the old Boise Rising Suns, a popular team there for a while in the mid-1930s. Eijii was gone a couple of weeks after I showed up, called home by

his family in Nagasaki. He was the first Japanese I ever met and I liked him a lot, he had a heck of a sense of humor. A couple of years later, less pleasantly, I met a lot more of them.

We were all in the front room, going through the handshaking routine, when McTaggart stopped right in the middle of talking to a little group of us, held out his hand to tell us to be quiet and then took that glove out from under his arm and put it up to his ear, the mitt opened wide.

I wasn't paying too much attention at first, too busy smiling and listening to Harrington warn me about Haydn Walker, the owner, who was, he said "a nice enough guy when he's sober. But that ain't often."

I laughed at that, thinking he was joking, and then I saw McTaggart raise that hand again, listen to that mitt for a few seconds, then put the mitt in front of his mouth and start talking. "Joe," he said, "Listen, kiddo, I know what they're saying, but that's not the way it is. You're hitting the ball fine. Hell, you got a ten-game streak going, d'you know that?"

He paused, put it back to his ear to listen again, then back to his mouth, saying, "There you go. Yeah, that's what I figured. You're coming around nicely, Joe, just keep swinging, okay? And don't worry about that stiff neck. You had the same thing last year, too, and it loosened up in the heat, right?" He listened, nodded. "Well, it'll be hot in St. Louis, Joey, always is. I think you'll go on a tear. Just keep those feet apart in your stance, right? And bring those wrists through first, got it?"

McTaggart listened, nodded again. "Yeah, Joe, no problem. I'm here when you need me. Yeah, sure. Okay. Talk to you later, kiddo." And he closed the mitt up and shoved it back under his left arm.

I looked at Harrington, the question on my face.

Harrington just smiled, shook his head, whirled his finger around his ear and whispered "He's crazy as a loon, kid. Thinks he's talking to DiMaggio."

"Joe DiMaggio? *The* Joe DiMaggio?"

He laughed. "The very one, kid." He put his arm over my shoulder. "Look, kid, Jack McTaggart's a hell of a swell guy, but he's got some strange habits, okay? He reads all the damn time for one thing — newspapers, magazines, history books. You'd think he was a damn professor.

"And now there's this thing with DiMaggio that's been going on for

the past week or so. Hell, Jack never hit better than .268 in six years in the big leagues, but he thinks DiMaggio needs his advice — not to mention they're talking to each other through a catcher's mitt." He laughed, shrugged his shoulders. "I don't think Jack even knows Joe Dee, to tell you the truth. Jack spent all his time in the National League."

Then Harrington turned away from me, smiled and walked over to McTaggart to put his arm around his shoulders and start chatting about the Pilots and how much the kid — that'd be me — could help the pitching rotation.

And I did help the rotation there at first. I was eighteen, with a rising fastball and a ton of confidence. I'd been mowing them down back home, after all — star of my high-school team at Decatur Central High, and then getting great ink playing for the Central Illinois All-Stars in a tournament at St. Louis' Heinie Meinie Field after I graduated. Heck, I threw a no-hitter there in late May, and a one-hitter a couple of days later. That's when Freddie Hawn, a scout for the Cardinals, came calling and now, here I was a professional in the Cardinal organization, on loan to the Boise Pilots.

I got my first chance to pitch in the final game of three against the first-place Twin Falls Cowboys. I was darn near perfect, throwing a two-hit shutout, with ten strike-outs and just one walk. I even had a stand-up double in the fourth to drive in one of our four runs.

Do you know what it's like to be in control of a game like that? There's no feeling like it in the world. I knew, absolutely *knew*, I could get every batter out. My fastball was hopping, with Cowboys waving at it as it went by. I even got two strikeouts with my curve. Been eating my Wheaties, you know what I mean?

The win tied us with Twin Falls for first place and I figured I was pretty damn swell. An hour later, when we climbed into our broken-down old Ford team bus after the game and headed toward Ogden for a pair of rain-out double-headers, I was sure I was on my way to great things. The St. Louis fans would be screaming my name by August or September.

I couldn't sleep for thinking about the game. The bus rattled and groaned as McTaggart, doing the driving, ground it through what gears it had left, up toward Sawtooth Pass and then down the other side on Route 83 into Ogden. There was great scenery out there somewhere, I remember

thinking, but between the dirt on the inside of my window and the rain on the outside I couldn't see any of it.

I was in the second row, behind Harrington, who had the knack for sleeping soundly even in that bus. Dizzy with my own success, and maybe a little homesick, I sat back and tried to drift off, tried not to think too much about how glorious and wonderful my future in the game was certainly going to be if only I could make a few friends and not be quite so lonely.

Eyes closed, thinking about home, I heard someone softly talking. I looked up and it was McTaggart, holding his glove to his ear with his left hand while he drove that narrow mountain road in the rain with his right. He was talking to the pocket of that old Rawlings mitt.

"Well, ain't it just like I told ya, Joe?" he was saying. "You just stay with it and it'll come. That's great, kid, just great."

He put the glove to his ear for a moment, listened, then put it back in front of his mouth to speak again. "Three hits? That's great. You got those Yanks going now, Joey. I'm telling you right now, you fellows are gonna have a great season."

He listened some more, nodded. "Yeah, that's just swell, Joe. Double-header tomorrow? Yeah, for us, too, down in Ogden. Yeah, we won tonight, the kid pitcher did a heckuva job, I think maybe he's a prospect."

He listened again, then moved the glove back and ended with, "Yeah, you, too, Joey. Knock 'em dead. Yeah, and keep that stance wide, right? Yeah, okay. Yeah, you, too."

And McTaggart set the glove down to the side of his seat and put both hands back on the wheel before leaning forward to peer through the windshield wipers as they pushed the water around on the glass. We were through the pass now and heading steeply downhill on that slick, narrow mountain road. I wanted to ask McTaggart about what was going on. I wanted to find out if he was mad as a hatter, crazy for talking to Joe DiMaggio through his glove in the middle of the Utah rain. But I didn't ask, he was concentrating hard on keeping us on the road and I didn't want my curiosity to kill us all. And then the moment passed and Harrington woke up and started talking to me about developing a change-up and then, finally, as we drove along the edge of the Great Salt Lake and on into Ogden, I managed to catch a couple of hours sleep.



When we got to our hotel in Ogden I bought a copy of the *Post Register* to read over breakfast and there it was, top headline on the back sports page: "DiMaggio's three hits beat Browns."

I didn't know what to make of that.

After breakfast, I got a couple more hours sleep in the Golden Spike Hotel and then it was time to get to the ballpark for our double-header. I got there early, that's the only way for a kid pitcher to get any cuts at all in batting practice. In the clubhouse — a new place, but bare, with a concrete slab floor and some wooden benches and an open wooden locker for each of us, nails tapped into the sides and backs — I sat there and pulled on my sanitaries and then my red Pilots socks with the three white stripes, rolling the socks and the bottom of my pants and the sanitaries all together up near the top of the calf. I was at the stage of my career then when just putting on the uniform was a thrill.

McTaggart came by as I finished. He smiled at me. "C'mon kid, I want to watch you take a few swings," he said, and then he walked me through the tunnel and into the dugout and that bright Utah sunshine. It was hot, with the wind blowing in from the desert and the salt lake; the air so humid and salty you could feel the stuff on your skin and taste it in the air.

I stepped into the cage to hit a few and McTaggart talked for a minute or two about my swing, about how I needed to level it off and tighten it up some, that I wasn't ever going to be hitting home runs and I should worry about singles.

I'd hit that double off the wall the night before, but I wasn't going to say anything to him. He was the skipper and I was the rookie and if there was anything I'd learned in just two weeks of being a professional, it was to keep my mouth shut.

And then, as I swung level and flat, slapping line-drives out over short, he said this to me:

"Kid, I know you was awake last night when I was talking to Joe."

I didn't say anything.

"Joe and I was roommates back in '33, with the San Francisco Seals," he said. "Joe was having some trouble at the plate and asked me to take a look at his swing. Well, I thought he had a hitch in there, and then was trying to catch up with it, punching at the ball instead of swinging through. We worked on it some, and...."

"And he went on that streak," I said, stepping back from the plate. I turned to look at McTaggart. "Everyone knows about that, when he hit in 61 straight. That's the professional record."

"You got it, kid," McTaggart said, and turned to spit out a big hunk of tobacco. "He's trusted me ever since, that's all. You see me talking to him, well, that's all it is, just a little free advice. I keep up with how he's doing and I give him some advice here and there."

"Sure," I said, thinking about how all that good advice was being sent through the deep pocket of a Rawlings catcher's mitt. I didn't know what else to say, so I just stepped back into the box and waited for the next pitch from Harrington to come into me, straight down the middle, perfectly understandable. See the ball. Hit the ball. It's a simple game, really.

That evening I spent the first game in the bullpen, waiting for the weather to cool down some and watching us lose the opener, 3-1, on a long home run off a sweet swing by Swish Nicholson, a guy who earned his nickname a couple of years later with the Cubs when he hit twenty-nine of them.

The nightcap I spent in the dugout, right next to McTaggart. He wanted me to watch the Ogden hitters and tell him what I saw, the strengths and weaknesses. That was harmless enough, and even got to be pretty interesting as Howie Petersen pitched a good game at them, keeping a shutout going through the first five. Then the catcher's mitt rang in McTaggart's head and it all got strange.

We were watching Petersen get behind in the count in the first two hitters he faced that inning before getting them both to fly out to left. When he went 2-0 on the third guy with a couple of breaking balls, one outside and one in the dirt, I figured it was time for serious worry; but McTaggart sat up like he'd heard something the rest of us couldn't find on any radio dial and then he picked up that mitt and gave it a listen.

He nodded. "Sure, Joe," he said, "Yeah, he's got that sloppy curve and then he'll try to run it in on you with the fastball. He never throws that curve over the plate, so wait on him and then go for the pump, okay?"

Petersen came in with a fastball and the guy drilled it, foul, to left. At least it was a strike.

"Sure, Joe," McTaggart was saying, "But you got to go down and get that fastball and knock it right out of there, okay?"

He paused, listened. Petersen, working fast, came in with another curve in the dirt. Ball three. "Joey," McTaggart was saying into his glove, "you got to trust me, he'll come in with that fastball down and in, you just be ready."

He listened again, nodding. Petersen came in one more time with the curve, in the dirt and outside for a walk.

"Joe," McTaggart said, "I got to get out there and talk to my pitcher. Stay on the line. I'll be right back." He handed me the catcher's mitt. "Here, kid. Talk to Joe while I get out there and settle Howie down, all right?"

I stared at him.

"Just say hi, kid. He won't bite," he said, and walked up the dugout steps and out onto the field.

I held the mitt to my ear. There was nothing. "Hi," I said, figuring it couldn't hurt. Still nothing.

"Mr. DiMaggio?" I tried. Silence, but then McTaggart, halfway out to the mound, turned back to look at me, put his hands out, palms up as if to ask me how the conversation was going. I shrugged, shook my head slightly.

He frowned. "Keep him on the line, kid," he yelled, and then turned back to stride out to where Petersen stood there, the ball in his hand, waiting for him.

So I tried again. "Um, Mr. DiMaggio, this is Delbert Potter. I'm a pitcher here with the Boise Pilots? Jack McTaggart — he's our manager here — he says I should say hi and keep you on the line for a couple of minutes. He's out talking to our pitcher right now and he handed me this, um, glove...."

The dugout was awfully quiet. I stopped talking into the mitt and looked down the bench. They were all looking at me, some of them grinning. I looked out toward the mound and McTaggart was walking back. He was giving Petersen one more hitter to get things straightened out.

"How's it going, kid?" he asked me as he reached the top of the dugout steps.

I put up my hand to shush him, listened intently to the mitt for a second, then put the pocket of the mitt close to my mouth, said "Yes, sir,

Mr. DiMaggio. Absolutely. I'll tell him you said so. Yes, sir. And good luck today. That's right, fastball, low and inside, sir. Yes, sir, that's what he says." I gave it a listen again, then "And thank you, Mr. DiMaggio. Okay, then. Thank you, Joe."

And I pulled the mitt away from my face, folded it together and tossed it up to McTaggart. "It's going fine, Skip," I said. "Mr. DiMaggio — Joe — says thanks for the tip. He'll be watching for that fastball."

"That's great, kid. Thanks," said McTaggart, catching the mitt as he came down the steps before plopping down on the bench. "Now let's see what old Howie can do here with the bottom of their line-up."

Howie, it turned out, couldn't do much. We lost the first game, and then the second, too, to fall out of that tie for first.

DiMaggio, in St. Louis, had three home runs and a double off the Browns.

IT WENT ON LIKE THAT for the next few weeks, McTaggart talking to DiMaggio through that catcher's mitt with me acting like some sort of receptionist when McTaggart couldn't talk, chatting away with the glove like it all was for real, then listening while McTaggart gave Joe Dee plenty of advice on how to handle things as the whole nation started paying attention — a lot of attention — to The Streak.

There was a war going on in Europe, we knew, and the Japanese were marching all around China. War fever had even reached into Boise, with B-25 bombers practicing their bombing runs from Gowen Field, the big new airbase just half-a-mile past the ballpark's leftfield fence.

But baseball is what mattered, from our struggles to hang onto first place in the Pioneer League to Jack McTaggart holding that big, floppy Rawlings mitt up to chat with DiMaggio about how to keep that streak going.

When Joe broke the Yankee record of twenty-nine games on a bad-hop single that ate up Luke Appling at short for the White Sox, it was McTaggart on the mitt congratulating him before handing the glove over to me so I, too, could tell Joe way-to-go.

When Bob Muncrief, a rookie right-hander for the Brownies, had Joe stymied the whole game it was McTaggart who told Joe not to worry, he

figured the kid wouldn't walk Joe in the eighth but would pitch to him out of pride, and he was right. Joe singled to save the streak. In the next day's Boise Statesman I read where Muncrief said, "I wasn't going to walk him. That wouldn't have been fair — to him or to me."

When the Yankees were finally in first place a couple of days later and playing at home, McTaggart was on the mitt with Joe as Tommy Henrich came up with a man on and one out. McTaggart told Joe not to worry about a double-play, Henrich would bunt the man over to help out and sure enough that's what happened. Henrich asked Joe McCarthy if he could bunt and McCarthy said yes. The sacrifice moved the runner over and gave Joe one more at-bat. He doubled and kept the streak going.

It went on like that for weeks, the guys finding it pretty funny there for a while. Eventually, though, the sportswriters in Boise found out about it — from Harrington, I think — and it all got pretty sour. Most guys thought the joke had gone on way too long, and it was taking attention away from the field, where we were playing pretty good and in a race for the Pioneer League pennant.

McTaggart never let on the whole time whether he even knew we all thought it was just a prank. As far as he seemed to be concerned, it was all very simple, Joe DiMaggio needed his advice and he was happy to help. Giving advice, after all, was what he did for a living, as he told me often enough.

One afternoon, we stood out in the bullpen and he worked on teaching me how to throw a change-up while those bombers roared behind us. "It's all about keeping 'em guessing kid," he said. "If you can change speeds, it'll make that fastball of yours look a little faster and give them hitters something else to think about."

I nodded, took the ball from him and tried one, sliding the ball back from the fingertips and in toward the knuckles, like he'd taught me. It worked, but I didn't have much control with it and told him so.

"That'll come," he said, and then he smiled. "Look, kid, you got smarts, and that counts for a lot in this game, especially when you're pitching. Guy like you, you got to outsmart the hitter, know what I mean?"

I nodded again — only later did it dawn on me what he'd really been telling me about my physical tools — and then I tried a few more. I could

tell the change would help me, and Lord knew I needed the help. I thanked him, after I finally got a couple of them spotted where he wanted them.

"Oh, hell, kid, don't thank me for doing my job," he said. "I'm supposed to be a coach, remember? I'm supposed to help kids like you learn to play this game a little." Then he'd grinned suspiciously. "Plus, I'm supposed to win some, too, and damned if we're not doing that, right, kid?"

He turned around and watched a bomber coming in for a landing. "You ever think *ε*bout history, kid?"

"I can tell you who led the National League in hitting every year this century," I said, "just try me."

He smiled. "I bet you can, kid. But what I was wondering about was this war we're heading into. Going to be some history made. Might not be too long before them pilots find themselves dropping the real thing instead of sacks of flour, you know what I mean?"

"You really think it'll come to that?" I asked. The way McTaggart read every newspaper he could get his hands on I figured he knew what he was talking about. Me, I hadn't read anything but the sports page in maybe my whole life.

"Yeah, kid, I do. I ain't got much of an education, but it looks to me like we're going to be in this thing one way or another, and soon. And I'll tell you what, we won't be out here playing ball if the whole country goes to war, you can count on that. There'll be more important things than baseball."

"What'll we do, then?"

"Ballplayers?" He shrugged. "Go fight, I guess. Wouldn't that be a mess?"

"Sure would," I agreed, thinking mostly of myself.

He turned his back on the bombers and looked back into the field. "Hell, we all make our own history one way or another, you know? Joe's going to get his made with this streak. Me and you, who knows? How you going to make the history books, kid?"

A month before I'd have answered with something about being in the Hall of Fame. But now I wasn't so sure. The Pilots were winning, sure, fighting it out for first all the way with Twin Falls and then, later, with Ogden, too. But my pitching had gone south as the hitters caught up with

my fastball and learned to sit on my curve. After a couple more real disasters as a starter, by early July I was in the bullpen in middle relief, trying to get my confidence back and get the ball over the plate, reduced to hoping a new change-up would cure my ills.

Somewhere along the line I realized I was in a terrible rut — like those tracks out past the left-field fence in Airway Park in Boise.

The field was new, then, and a gem — I realized how lucky I was to play there once I'd seen the other parks in the league. But just beyond the fence ran those wheel ruts of the Oregon Trail. I walked in them all the time, they were on my way to the park from Mrs. O'Connor's boarding house. Walking along, knee-deep in ruts that began in Missouri and kept on going all the way to the Willamette Valley in Oregon, I could picture those wagons moving along slowly, steadily to whatever waited for them, following that trail like there were no options to go anywhere else, do it any other way. They must have been hell to get out of, those ruts. I know mine were — the fastball getting ripped, my curve not fooling anyone, my new change-up too little too late. I wanted to just pack it up, leave go of it all and head home to Decatur.

Through everything I kept helping McTaggart talk to Joe, listening in as McTaggart said Joe Dee should swing on that 3-0 count like he did to get the hit in the fortieth game, then hearing McTaggart relay Joe's description of how he'd slapped a double off Dutch Leonard to tie Sisler's record.

And I anguished with them both when DiMaggio's favorite bat was stolen between games of that crucial double-header in Washington.

I was out on the mound, struggling to get through the fifth inning at home against Lewiston, the last-place team, when McTaggart got that call. I'd walked the first two men I faced, then dropped down a gear to get it over the plate and given up a triple off the wall, then walked the next guy. Finally, the guy after that hit a scorcher to short, but Tommy Seals at second turned it into a slick double-play that got me some outs but cost me a run. I looked into the dugout to see how McTaggart was taking it all, and he was talking to that catcher's mitt.

I was a wreck, all the craziness of that long, hot Boise summer running around in my head so fast I was dizzy with it. I stood there, looking at McTaggart, willing him to notice me out there, have some pity on me,

take me out, send me home, end all this misery. Instead, when I needed him most to be my manager he was talking to that glove.

I glared at him until Harrington, sitting next to him, noticed me and elbowed him. He looked up, frowned, then stood up, climbed those dugout steps and waved at the ump for a time-out as he walked toward me, that catcher's mitt tucked away like always under his left arm.

"What's up, kid?" he asked.

"I don't have it, Skip. I think maybe, well, you know..." I said lamely, handing him the ball.

"You know what, kid," he said. "Somebody stole Joe's bat between games of that doubleheader."

"Oh, Christ Almighty." I was a religious man, even back then, and I wasn't one to use the Lord's name in vain. But I couldn't believe it. Here I was in the middle of a real mess and all McTaggart could talk about was DiMaggio and that damn streak.

He could see how mad I was at him, but it didn't faze him. Instead, he just smiled, said, "Hey, kid, hang on a second. I got to tell Joe something." And he put the catcher's mitt up to his face to talk.

"Tell Joe something!" I yelled at him, reaching out to pull the glove away, all the worries and the anxieties and the fear boiling up out of me at last. "Why don't you tell *me* something, McTaggart? For Christ's sake, man, I'm trying to pitch to these guys and all you want to do is talk into that damn mitt!"

He just smiled. "That's good, kid. Nice to see some fire in those eyes." He tossed me back the ball. "Now let's see if that new change-up works," he said, and put the glove back up to his face, mumbling into the pocket as he turned around to walk back to the dugout.

I turned around to stare at my teammates, all of them looking at me, slapping their fists into their gloves, shouting encouragement like this was all just an ordinary part of the game.

All right, then.

I stood there for a moment, my career in a shambles before it ever got started, my manager talking to Joe DiMaggio through his mitt while I watched my dreams blow away in that hot summer breeze.

And then I started to pitch, buzzing the first one high and tight, giving the Idaho Falls batter a nice, clean shave for ball three. Then a curveball



for strike two, and then that change-up, fat and right down the middle, but looking faster than it was so the guy swung early and hit it off the end of the bat instead of the meat, lofting a lazy flyball to left, where Mel Nelson caught it without taking a step.

From the mound, I could hear McTaggart in the dugout, saying "I'm telling you, Joe, the bat's in Newark. And I got friends in Newark. I'll call 'em and you'll have the bat back tomorrow, Joe, swear to god."

And the bat, I read in the sports page later, really was in Newark, and Joe did get it back and keep the streak going. And darned if I didn't win that game, too, 7-5, for my third — and last — professional win.

It all ended a couple of weeks later, on July 17 in Pocatello. I was on the mound in relief again. Jack Coates, our catcher, was sitting it out, so McTaggart was behind the plate, trying to teach me a few things while he could.

I was still mad as a hornet at him, and while he'd kept on with the conversations with Joe Dee, I hadn't played any of those stupid tricks with the DiMaggio mitt since that night back in Boise. But he ignored all that and treated me like everything was copacetic, smiling and grinning and telling me how great my stuff was. That just made me madder, and I reared back harder, putting about everything I had into that fastball and shaking off the sign every time he called for a curve or a change-up. Hell, I figured I'd just fire away at him. And it felt good, to tell you the truth, though the Pocatello hitters were hammering me and I was having a hard time protecting a six-run lead we'd built up in the first four innings.

In the sixth it started getting obvious. Pocatello's number-three hitter slapped a sharp liner to left that landed in front of Nelson. Then the next guy took a couple of strikes before I shook off the sign for the change and came in with my best fastball and he ripped it right back into McTaggart's glove. It would have gotten us out of the inning, but McTaggart couldn't hold onto it, and on the next pitch the guy went to the pump with a towering home run that's still up there somewhere sailing through the Idaho night sky looking for some mountain peak to plow into.

McTaggart came out to talk to me, clanking up to me in that beat-up catcher's gear, his mask up on top of his head, his glove on his left hand.

"Got that one up some," he said, and I nodded. I figured he'd be talking to DiMaggio any second now, the streak was up to fifty-six and going strong.

I was feeling mean. "You should've hung onto that third strike. We had that guy."

McTaggart smiled thinly, held up the Rawlings mitt. The web was torn from between the thumb and first finger, the leather lacing dangling there. "Didn't realize it until just now, kid. That foul tip ripped right through my mitt."

"I'm sorry."

"Yeah, me too, kid." He held the glove up to his ear. "It ain't working so I can talk to Joe, either." He shook his head. "Too bad. I got a bad feeling about Joe today."

"Sure," I said, "a bad feeling."

"And I got a bad feeling about your stuff, too, kid. I think they got you figured out. I'm gonna bring in Townie. We got to protect this lead and win this one."

I nodded. I knew I was done. Hell, I'd known I was done for the past month. If I couldn't get anybody out in the Pioneer League, I sure as hell wasn't going to be striking them out for the Cardinals any day soon.

And so I went to the bench, and then into the showers, and, just a few weeks later, back home to Decatur.

In Cleveland that night, DiMaggio was up against Al Smith, a veteran leftie. Bob Feller would face him the next night, and most people figured Feller could stop the streak if anyone could.

But Smith got the job done: a nice play at third by Ken Keltner, a walk, another nice play at third by Keltner, and then a groundball into a double-play and that was it.

In Boise, McTaggart worked on fixing that mitt between innings and got it done in five minutes, but he said it didn't work anymore. Not that it mattered. By the time our game was in the fifth, the Yankee game — and DiMaggio's streak — was over.

By September I was back on the farm in Illinois, worrying about soybeans and corn instead of Joe Dee and Jack McTaggart's catcher's mitt. While I was out standing knee deep in corn furrows, DiMaggio went right back on another good streak and the Yankees won the pennant, seventeen games in front of the Red Sox.

Later, I heard from Andy Harrington that Jack McTaggart died at Okinawa. He was top turret gunner and flight engineer on a B-25 and they

were attacking Japanese gun placements on the beach, flying in so low that their props cut a wake through the lagoon. When they pulled up to drop their bombs some enemy sharpshooter — who knows, maybe Eijii Sawamura — got at them with anti-aircraft fire and that was that.

McTaggart and the others couldn't get out in time, and so they all made it into the history books as part of the price the country paid. I bet McTaggart wished, right there at the end, that he had that catcher's mitt with him, that it worked again and he could talk to Joe one last time before they went into the water.

I can see that in my mind, see him talking to Joe, saying goodbye as the plane's right wing caught the water, sending the plane careening in and breaking up over the reef-line.

As for me, I wound up fighting the war with a typewriter, writing about the real heroes as they waded ashore at Guadalcanal and Ie Shima. I met a lot of ballplayers along the way, guys ripping out the heart of their careers to do the right thing for themselves, for their country, guys making history. I never ran into DiMaggio in all those years or anytime after, even though he was doing his duty, too.

After the war I took advantage of the GI Bill and got my college degree and wound up teaching high-school history classes and coaching the baseball team at Decatur Central, back where I'd started.

I helped some good kids along the way, and a few of them even made the bigs. If you ever saw Del Unser roam the outfield for the Phillies you saw one of my best. And if you watched Bobby Gamin throw his no-no against the Mets in '74, you saw Jack McTaggart's change-up in action. I taught it to Gamin eight years before and he took us to the state title with it — that and his ninety-mile-an-hour fastball.

I know — I always knew — that Jack McTaggart was crazy as a loon and none of that happened the way it seemed to be happening. Joe Dee could have cleared all that up for me just by looking at what I could show him, by putting the mitt on his left hand and chuckling a little and telling me it hadn't happened that way.

But I didn't really want to know, not like that. What I wanted, what I've kept alive, is the thought that maybe it really *did* happen that way, that my season in Boise was part of something important, something that mattered.

And that catcher's mitt? McTaggart gave it to me when I got on the train heading home, said he thought I'd earned that much, at least.

Now it sits here, looking comfortable in my bookcase, right there next to the picture of me and the kids after we won state, Bobby Gamin holding up that trophy and grinning, me standing in the background.

I've had a good, long run with this game, with this life. I married a good woman and we had fifty years together. She died a couple of years ago, so I'm lonely again the way I was in 1941, but we did fine while she was here — four kids, a pack of grandkids, even a great-grandson who looks to me like a natural hitter.

I travel some now, trying to stay busy and interested in things. I get up to St. Louis a lot for Cardinal games, and once or twice a summer I head to Chicago to see the Cubs.

I went west, to Boise, after I head that DiMaggio had died. I made a nice little vacation out of it; saw the mountains, saw how big the city had become, walked along those wagon-wheel ruts in Ann Morrison Park, thinking about Jack McTaggart and Joe Dee and the way things were back then. And then I came on home to Decatur.

Every now and then, just for fun, I pick that catcher's mitt up, fiddle with the laces some, pound my fist into the pocket a few times. Then I start talking, chatting with McTaggart and DiMaggio, pretending that they can hear me, pretending that they care about what I have to say about teaching kids the game.

I put the glove to my ear now and then for a quick listen, but the old mitt has nothing much to say to me. Except for this one remarkable thing: 56 games, from May 15 to July 17, from a single off White Sox pitcher Edgar Smith to a double-play against the Indians, Boudreau flipping the ball to Mack to get it started. A .357 average that year, with thirty home runs, forty-three doubles, eleven triples. You can look all that up. It's in the history books, where it belongs, where it will probably be forever.



*Here's a dark and edgy new story with a surreal tinge from one of England's most affecting fiction writers. M. John Harrison's recent books include The Course of the Heart, Signs of Life, and a new story collection entitled Travel Arrangements is due out any day now in the U.K. Mr. Harrison reports that he is currently working on an untitled space opera and he finds it hard to believe he's writing books in that futuristic time known as the twenty-first century.*

# The Neon Heart Murders

*By M. John Harrison*



ALL DOWN THE WEST COAST of the island at night glitter the lights of a city five miles long, its towers like black and gold cigarette packs standing

on end. In the malls fluorescent light skids off the surfaces of hard and soft designer goods: matte plastics, foams of lace and oyster satin, the precise curves of cars and shoes and shoulder pads. This city is well known for the scent of Anaïs Anaïs in its streets; stacked video screens in the cocktail lounges; and, down by the ocean front — where men push past you smelling of sweat and seafood, and you can hear the soundtrack of your own life playing from the dashboard of a white car — neon of green, red or frosty blue. Music pulses from the amusement arcades, clears its throat in the night clubs. In the jazz bars they serve only "Black Heart" rum, and you can hear the intricate bass lines twenty miles out to sea.

The best of the bars is the Long Bar at the Café Surf, with its decor of strained contrasts. Marble pillars and designer blinds with thin aerodynamic slats. Cane tables and salt-blistered chrome bar taps. Forgotten movie stars crowd the walls in brushed aluminium frames. Exotic beers

glitter from the shelves of the cooler. While under the red neon sign "Live Music Nightly," the Café Surf two-piece — piano and tenor saxophone — ambles its way through the evening's middle set.

The pianist, a young man with a mobile mouth, plays the house Kawai with one hand while with the other he coaxes from a piano-top synthesizer the sound of a deceptively relaxed bass. Just now he is Relaxin' in Camarillo. He picked this tune up from a Spanish bootleg CD so cheap its cover showed not Charlie Parker but Johnny Hodges. The rhythms flick and rip across one another, tangle and separate.

The saxophonist is an older man. White face, black rollneck, white hands. Years of music have tightened the muscles round his mouth into two deep grooves. Every so often he stops to watch the pianist take a solo. At these times his expression is one of puzzled admiration, as if he heard someone this good once before but — because he has played so much music since — now forgets who or where. (It was in a bar much like this one, somewhere less relaxed, on some bigger mass of land perhaps. Perhaps it wasn't in a bar at all.) This is the sole acknowledgement the old can give the young. Anything more would be too bitter; but so would anything less. He nods his head in time, pulls sharply on his cigarette, glances down at the saxophone in front of him.

Possibilities cascade.

A middle-aged man who looked like Albert Einstein used to come in during the middle set and buy a drink. He would stare round helplessly for a moment, then smile and light his pipe. He would sit down in a corner in his raincoat; get up again to put a match carefully into an ashtray on the corner of the bar; sit down again. He used to do all this with a kind of meticulous politeness, as if he was in someone's front room; or as if, at home, his wife required of him an unflagging formal acknowledgement of her efforts. He would stare at his pipe. He would start a conversation with a girl old enough to be his granddaughter, getting out his wallet to show her — and her friend, who wore torn black net tights and industrial shoes — something which looked in the undependable Long Bar light like a business card; which they would admire.

In fact he was not as old as he looked; he and his wife lived apart; and he was a detective.

His name was Aschemann.

Though he loved the city, Aschemann often complained to himself:

"Phony music, cheap neon, streets which reek of bad money. Hands which make a big gun look small. All the burned-down rooms and lists of suspects. Crimes you might commit yourself, after a late night call. Those suburbs, you have to solve them like a labyrinth. And always some half empty hotel! Always someone luring the innocent down the curve of the street, but before you can investigate, before you can earn a blind dime, you have to find out what's behind that door.

"The true detective," he used to warn his assistants (mainly local young men and women on one-month trials from the uniformed branch, neat and ambitious, fluent in three Pacific Rim languages), "starts in the center of the maze. Crimes make their way through to him. Never forget: you uncover your own heart at the heart of it."

**H**IS ORIGINAL VISITS to the Long Bar were made during the investigation of a series of crimes against women. First on the scene of the original killing, he had discovered two lines of a poem tattooed in the shaven armpit of the victim:

Send me a neon heart  
Unarmed with a walk like a girl

She was a fourteen-year-old prostitute from the Rim — a grown-up girl in box-fresh Minnie Mouse shoes. Forensic investigation proved the tattoo to have been made after the heart stopped beating, in the style of a Carmody tattooist now dead but popular a year or two before.

"Find out how this is possible," he told his assistant.

When Aschemann first walked through the door of the Café Surf, it was not night: it was late morning. The bar was full of sunlight and bright air. Taupe sand blew across the floor tiles, and a toddler was crawling about between the cane tables, wearing only a T-shirt with the legend SURF NOIR. Meanings — all incongruous — splashed off this like drops of water, as the dead metaphors trapped inside the live one collided and

reverberated endlessly and elastically, taking up new positions relative to one another. SURF NOIR, which is a whole new existence; which is a "world" implied in two words, dispelled in an instant; which is foam on the appalling multitextual sea we drift on.

"Which is probably," Aschemann noted, "the name of an aftershave."

In his search for the tattoo murderer, Aschemann had himself driven about the city in an unmarked car. He sat alertly in the front passenger seat as the rose-red Cadillac descended each steep dogleg curve of Maricachel Hill, down through the Moneytown palms and white designer duplexes to the Corniche. He stood trying to light his pipe in the strong salt winds which scraped the harbor mole in the middle of the day. He watched from Suicide Point the late-afternoon sunbathers on Three Mile Beach, the evening windsurfers in the bay.

Less in a search for clues than a search for himself — for a detective capable of understanding the crime — he visited his estranged wife, a thirty-six-year-old agoraphobe living in squalor in the "suicide suburbs" up the coast. When he arrived, boys in long gray shorts and singlets were skateboarding the concrete service road between her house and the beach. They looked tired and blank. Sand blew into Aschemann's face as he raised his hand to knock on the door. Before she could answer, he went back and sat in the car on the passenger side of the front bench-seat and explained to his driver:

"There are kinds of agoraphobes to whom even the arrival of a letter or a telephone call is too much of the outside world. Someone else has to answer it for them. Yet as soon as you step into their houses they become monsters. It is less that they are uncomfortable in public than that they only feel in control on their own ground. Agoraphobia can be a very aggressive territorial strategy: refusal to go out is a way of forcing the outside to come in to where it is manageable. On the agoraphobe's home ground you must walk through the agoraphobe's maze."

In his wife's rooms every inch of floor and furniture space was filled up, so that you didn't quite know how to get from the door to the sofa; and once you had got there you couldn't get up and move about except with extreme caution. All quick movement was damped by this labyrinth, where there was even a code — three or four quick pulls on the cord — to



get the lavatory light to go on. Therapy only confused her, her friends no longer came to see her, and she had retreated into a further labyrinth, of drink, fuddled political principles and old emotional entanglements. At Christmas he bought her a perfume she liked called *Ashes of Roses*. The rest of the time he tried to stay away.

"Come over," she would encourage him. "I'll get the Black Heart Rum you like so much." She phoned him two or three times a week to talk about their lives together, to find out what the weather was like where he was, discuss the view from her window. "You see that boat out in the Bay? Do you see it too? The blue one? What sort of boat is that?" But when he visited he rarely had the courage or energy to make himself go in, because if he did she would soon sigh and say, "We had such times together, before you took up with that whore from Carmody."

"Even though it is over between us," Aschemann told his driver as the Cadillac slipped away between the rag-mop palms and peeling pastel-colored beach houses on either side of Suntory Boulevard, "I sometimes seem to be the person who cares most about her. I am no longer in a position to look after her, yet no one else will. Because of this I feel not only guilt but an increasing sense of irritation with people I once thought of as 'more her friends than mine.' They have abandoned her as completely as I have. This makes them no better than me." Thinking he heard the rumble of skateboard wheels on concrete, he turned to look out the rear window. Sand was blowing across the road in the purple light. "Go back," he said.

The murders took him all over the island. The first evening he walked into the Café Surf and sat down, Aschemann noticed this —

The band was placed at the end of the Long Bar, near the lavatory door. People kept coming out of the lavatory while the band was playing, pushing between the piano and the bar. There were very fat women in jeans, very tall men wearing raincoats, thin boys like camp inmates with shaven heads, people crippled in small and grotesque ways. For a moment, as each of these figures appeared in the weird orange light, it seemed as if the music was squeezing them into existence; as if there was some sort of unformed darkness out there at the back of the Café Surf, and the band was squashing it like a fistful of wet mud into these shapes. It was that sort of music.

While Aschemann was drinking his first glass of rum, the band squeezed out two or three thin boys in singlets, earrings and studded leather belts. As he ordered his second, and drank that more slowly, in little sips that coated his mouth with the taste of burnt sugar, it squeezed out some boots with pointed steel tips, and an old lady in a print dress; it squeezed out a suede cowboy hat. It began squeezing out people young and old, and people middle-aged. Surprisingly few of them were middle-aged.

"Get back," whispered the saxophone, "get back. Get back to where you once belonged."

But they never did. They bought drinks at the bar and then, laughing and shouting, wandered out into the lighted street. Were they in themselves a kind of surf or spray, brought into being where the powerful tidal forces of the music came into rhythmic contact with the fixed land of the Long Bar? Thoughtfully, the man who looked like Einstein watched them go.



OTHER CRIMES came and went, but the murders continued, each one publishing new lines of the verse. There was nothing to connect the victims but their shaven armpit and Carmody-style tattoo. "And, of course," as Aschemann would remind his latest assistant, "the investigation itself." Aschemann had forbidden the detective branch to work the case. Track record as well as seniority allowed him to do that, sheer weight of cases solved, paperwork successfully filed. Word went out that it was his crime. "He can keep it," was most people's opinion.

After perhaps six months, his own wife became a victim.

Alerted by a neighbor, they found her sprawled among the broken furniture, boxes of clothes, the piles of local ad-sheets, fashion magazines and old record albums, which had divided the floor of the room into the narrow waist-high alleys of the maze. It was hot in there. Up from all the yellowed pages, stronger than the smell of the body, came a stifling odor of dust and salt. It got in your mouth as well as your nose. A rich yellow light filtered through the wafer-thin slats of the wooden blinds. She had fallen awkwardly, wedged sideways with one arm trapped beneath her and the other draped across a copy of *Harpers & Queen*, her left hand clutching an empty tumbler, her cheap sun-faded print dress disarranged to show a yellow thigh: but not one of those piles of stuff, the uniformed men

# LAST CHANCE TO SUBSCRIBE AT OLD RATES

New subscription rates will be effective with the June issue. Don't miss this chance to lock in the old rates. You'll save up to 40% on the newsstand price.

Act now! This offer expires May 15, 2000.

- 
- ☐ Send me two years of F& SF at \$46.97. I save \$32.21 off the newsstand price. That's a 40% savings.
- ☐ Send me one year at the special low rate of \$25.97. I save \$13.62 off the newsstand price.

name \_\_\_\_\_

address \_\_\_\_\_

city \_\_\_\_\_ st \_\_\_\_\_ zip \_\_\_\_\_

Outside the US please add \$8.00 a year postage. Make checks payable in U.S. dollars drawn on a US bank. Allow six weeks for delivery of first issue. We publish 11 issues a year, including a special double Oct/Nov anniversary issue.

☐ Payment enclosed ☐ Bill me ☐ Renewal

☐ Charge my MC/Visa

Acct No. \_\_\_\_\_ Expdate \_\_\_\_\_

B00406

# *Last chances to subscribe At old rates*

Increases in printing, postage and other costs will force us to increase our subscription rates with the June issue. This is our first increase in three years, but you can still lock in the old rates for one or two years by sending us the postpaid card today. You'll receive 11 or 22 big issues of F&SF, including the huge 240-page anniversary issue. You can save up to 40% on the newsstand price, but only if you act promptly. This offer expires May 15, 2000.



## **BUSINESS REPLY MAIL**

FIRST CLASS MAIL PERMIT NO. 14 W. CORNWALL, CT

POSTAGE WILL BE PAID BY ADDRESSEE

T H E M A G A Z I N E O F

# **Fantasy & Science Fiction**

143 CREAM HILL RD.

WEST CORNWALL, CT 06796-9975

No Postage  
Necessary  
if Mailed  
in the  
United States



remarked, had been disturbed by her fall. There were no signs of a struggle. It was as if her murderer had been as constrained in here as anyone else. Tattooed in her armpit were the lines:

Send me a neon heart  
Send it with love  
Seek me inside

When they turned her over, they found her other hand clutching a letter Aschemann had sent her when they were still young. Called to the scene by a reluctant junior investigator, Aschemann examined this letter for a moment — giving less attention, it seemed, to what he had written than to the cheap airmail-quality paper he had written it on all those years ago — then went and stood puzzledly in the center of the maze. The assembled police, sweating into their uniforms, spoke in low voices and avoided his eyes. He understood all this — the coming and going, the flickering glare of the forensic cameras — but it was as if he was seeing it for the first time. Outside, the afternoon skateboarders in their SURF NOIR shirts rumbled to and fro on the corrugated concrete of the beach road. If he peered between the slats of the blind, he knew, he would be able to see Carmody, Moneytown, the Harbor Mole, the whole city tattooed stark and clear in strong violet light into the armpit of the Bay. After a moment or two, he said, "Bring me the details in my office later."

He said: "Do a good job here."

Later, he found himself looking out from Suicide Point in the twilight. Behind him, a new driver sat in the rose-colored Cadillac, talking quietly into the dash radio. There was a tender hazy light, a warm wind at the edge of the cliff, the whisper of the tide far below. A few eroded bristle-cone pines, a patch of red earth bared and compacted by tourists' feet. An extraordinary sense of freedom. He walked back to the car in the soft wind.

"I was only in their way there," he said. "Tell them I know they'll do a good job."

That evening he visited the Surf again.

He sat at the Long Bar and watched the band stroll through their

second set of the evening. They were as amused, as meditative — as guilty, Aschemann thought — as ever.

The pianist must always be setting one thing against another. Every piece he played was a turn against — a joke upon — some other piece, some other pianist, some other instrument. He cloaked this obsession with a cleverness which made it amusing. But even his generously cut summer suit, which sometimes hung from its own massive shoulder pads as if it was empty, was a joke on the old jazz-men; and you could tell that when he was alone in his room at night he was compelled to play one hand against the other. If no one else was there, he would play against himself, and then against the self thus created, and then against the next: until all fixed notion of self had leaked away into this infinite slippage and he could relax for a second in the sharp light and cigarette smoke, like someone caught fleetingly in a black and white photograph by Herman Leonard.

The saxophonist, meanwhile, nodded his head in time, pulled sharply on his cigarette, glanced down at the saxophone in front of him. Possibilities cascaded: the saxophonist entertained each one with an almost oriental patience. Long ago he came to some understanding of things incommunicable to the young, the obsessed, the energetic, because to them it would seem bland and seamlessly self-evident: "That which is the most complex is the most simple," perhaps; or "It is only because no music is possible that any music at all is possible." The universe now remade itself for him continually, out of a metaphor, two or three invariable rules, and a musical instrument called — for some reason known only to God — the saxophone.

That night the band squeezed out two dock-boys with dyed brushcuts, arm in arm with an emaciated blonde who kept wiping her nose on her pliable white forearm. Bebop golems, Aschemann thought, as he followed them along the Corniche in the soft warm scented darkness, then up Moneytown into Carmody: bebop golems. In Carmody, he lost them among the bars and transsexual brothels, the streets that stank of perspiration, oil products and lemon grass. One minute they were still distinguishable, the next they had merged with the life around them. They were gone, and all he could see was life. He could not really take in his wife's death, because all he could see around him was life.

Every evening after that he visited the Long Bar. The band squeezed out its golems. After his second glass of rum Aschemann shadowed them into the warm air and black heart of the city. He could smell the guilt and excitement that came up out of the gratings to meet them. He could smell their excitement at being newly alive there, in Carmody among the sights! One night, standing momentarily thoughtful at 10th and Miramar, he was picked up by a Marilyn Monroe lookalike in a white wrap-bodice evening dress and tomato red stilt-heel shoes. She was thirty, beautiful. She only needed a brushed aluminum frame. She took him to her room in a fourth-floor walk up behind the bottled-milk dairy at Tiger Shore.

It was bare: gray board floor, bare bulb, a single bentwood chair. On the wall opposite the window, the shadow of the slatted blind falling across a poster. SURF NOIR. "Hey," she said. "Why don't you sit here — ?" When she bent forward from the waist to undo his raincoat, the white dress presented her breasts to him in a flickering light. She knelt, and he could hear her breathing. It was placid, rather catarrhal. Later she lifted the hem of the dress and positioned herself astride him. So close, he saw that her gait, the shadows round her eyes, the foundation caked in the downy hairs by the corners of her mouth, had conspired beneath the undependable Carmody neon to make her seem older than she was. She whispered when he came: "There. There now." She was young enough for that act of generosity. She was a victim. With or without costume, she was one of the city's highwire artists. He had no idea what she was. He paid her. He returned to the Long Bar, and, resting in the music and light as he drank a third glass of rum, he thought:

Does it matter who she is, when every night here the world is somehow touched?

Eventually, Aschemann too was murdered.

No one knew what happened. Two of his staff, called to the Café Surf at three o'clock in the morning, found him not inside but out at the back on the wet sand beneath the pier. The air was warm and soft. Aschemann had squeezed some of the wet sand up into a kind of fist near his face. Had he been close to a killer? Or had he simply come down to look at the shallow water lapping almost tentatively at the base of each rusty pillar, the water a tepid purple color fluorescing suddenly in little flickers and

glimmers as a response to the headlights sweeping along the Corniche above?

When they found him, Aschemann was alive but unspeaking. Unsure about procedure, his latest driver had alerted the uniform police. They walked about on the beach with torches. They called an ambulance and tried to make him comfortable while they waited for it to arrive. But the ambulance was held up on 14th and warbled its way down through Moneytown too late. Aschemann raised himself suddenly and said, "Someone must tell my wife." After that, he was silent again. The detective branch arrived.

"Can you hear us?" they asked. "Can you tell us who did this?"

They advised one another tiredly, "Forget it, Jack."

In fact he was conscious until he died. He listened to all their soft talk. He smelled the smell of their cigarette smoke. But he made no attempt to impart the secret he knew. Instead, he thought about the band at the Café Surf. He thought about the black surf along the island's beaches at night, black surf with an oily violet sheen on the swell as it mounts. Wave after wave of new inhabitants. "Life in the breaks," he thought of saying to the assembled detectives. "That's what surfers call them. Look there, in the breaks." He thought of the poem. He thought about his crime. He thought about his wife waiting for everyone to come to her in her minotaur's cave; and the Carmody whore, who went out along the highwire from her room to everyone.

"We can never see the truth," he thought: "But does that matter at this level of things, when all that counts is sight itself?" Even though he was dying and could barely lift his head, he looked out across the bay at the lights on the other side and thought, "For instance: I've been here and seen this."

What if the city is itself a surf, of buildings and people and consumer goods? What if the motives that power it are tidal? What if unpredictable winds play against masses of water, currents too complex to understand? What if crimes are whipped off the crest of events like spray, with no more cause than that?

At this time of night, halfway through the middle set, the lights of the Café Surf go dim. There is a smell of food and, between numbers, laughter



and shouting. But the tables closest to the musicians are empty, as if an arc of fallout has cleared them. These tables are cluttered with empty Giraffe Beer bottles and crumpled serviettes. At the Long Bar they serve a cocktail called "Ninety Percent Neon." Marilyn Monroe leans out of a brushed aluminum frame, upper body bent forward a little from the waist, head tilted back to laugh, so that her breasts are offered to the paying customers wrapped in silk, jazz, red light from the neon sign. It's a life, the saxophonist often thinks, with a sagging twist of lemon left at the bottom, like an empty glass.

But what does he know? ☞

## COMING ATTRACTIONS

THIS BUSINESS OF PREDICTING the future is tough. Did you know that in one issue, Anthony Boucher announced that *F&SF* would be publishing Alfred Bester's novel *The Stars My Destination*? The book appeared in *Galaxy* magazine.

As this month's issue goes to press, it looks very likely—but not definite!—that next month's issue will feature an article by Daniel M. Keyes about the genesis of his classic story "Flowers for Algernon." The new TV version of the movie has spurred Mr. Keyes to tell the true history of how he created Charlie Gordon's story, and we're ecstatic to be bringing it to you (along with the original story)...but we're just not certain whether it will appear next month. Keep watching this space for details.

We can promise—cross our hearts—to have a new adventure story for you next month from R. Garcia y Robertson. His tale "Bird Herding" returns to the popular milieu of his earlier tale, "A Princess of Helium." By the great Elvis, this story rocks.

Next month we'll also have a new "Plumage from Pegasus" column by Paul Di Filippo and our regular columns. We also promise to bring you new stories by Ron Goulart, Ursula K. Le Guin, N. Lee Wood, Robert Reed, and Joyce Carol Oates, among many others. Honest.

Unfortunately, our subscription rates are going up with the June issue, so if you've been thinking about subscribing or renewing, now's a good time to act.



# FILMS

---

## KATHI MAIO

### OUTSIDERS: LOOKING IN, AND PEERING OUT

**M**OST American films aren't bad so much as empty. You watch them, and you may be shocked or amused while you watch. But they leave no lasting impression, except that there is no there there. Upon reflection, you realize that it's not just substance they lack — it's style, too.

I remember feeling this intensely when I watched the last two Batman movies. Oh, put Val Kilmer or George Clooney in a fetishist rubber suit, and you'll entertain me — for five minutes. But it takes something more than garish action with homoerotic undertones to hold my interest for two long hours. Like many, I blamed Joel Schumacher, the helmer behind *Batman Forever* (1995) and *Batman and Robin* (1997), for how boring those movies were. Yet Mr. Schumacher is a capable journey-

man director who did an adequate job creating his gaudy, live-action cartoons. It's not Joel's fault that he is not a macabre poet like Tim Burton. After all, who is? Except for Tim Burton, himself.

And that's the point.

Tim Burton is an original. And his films, short or feature, animated or acted, hit or flop, are all unmistakably his work. A Tim Burton film is saturated with that filmmaker's more-than-slightly-skewed personality, and is imbued with his unique artistic vision. I don't use a phrase like "artistic vision" lightly, either. But Tim Burton has definitely got that vision thing goin' on.

For me, Burton's latest film, *Sleepy Hollow*, is fascinating precisely because he directed it. In lesser hands, such an elaborately wrought and exceedingly gory screenplay as the one written by

Andrew Kevin Walker — and doctored, they say, by Tom Stoppard — would probably come off as an abomination. After all, except for a few names, the general time period (1799, according to the filmmakers), and the basic concept of the "headless horseman," there is practically no relationship between the current decapitation-fest and poor Washington Irving's original tale.

No longer is Ichabod Crane a gangly schoolteacher with an obsessive appetite for food, an eye for the ladies, and a sadistic taste for caning his students. In the current version, Ichabod (played by Burton regular Johnny Depp) is a sensitive and highly principled New York constable, devoted to reason and forensic science, yet possessing little stamina and even less intestinal fortitude for the more daunting aspects of detection. He blanches, even faints, at the sight of gore and violence. (Depp, in interviews, describes his character as "Ichabod Crane, Girl Detective.") Still, our hero's squeamishness does not deter him from his mission — which makes him all the more heroic.

Mr. Crane's current assignment — clearly designed to get him off the backs of his NYC superiors — is to head upstate to an old Dutch farming village along the Tappan

Zee. There, he is to investigate several murders-by-beheading. At least, the religiously ratiocinative Ichabod is sure that they must be straightforward murders. He scoffs at the tales of a cranium-deprived swordsman that he hears from Sleepy Hollow elders. Still, those stories rattle his teacup, even before he comes face to space with the headless Hessian (with a head, played by Christopher Walken, and without a head, played by stuntman, actor, and Darth Maul, Ray Park).

Before long, Ichabod becomes convinced that there is nothing indiscriminate about the horseman's murderous attacks. The demon seems to know exactly who is on his hit list. But what is the connection between the victims? Is Ichabod's prosperous host, Balthus Van Tassel (Michael Gambon) involved? And what about Van Tassel's daughter, Katrina (the always fascinating Christina Ricci), a young woman who looks like an angel, but may very well be a witch?

The murder-mystery spin on the old story works well, although I had no trouble spotting the real miscreant. (All you have to do is pick the most talented and most underutilized member of the cast. They are sure to have their big scenes during the shocking denouement.)

But let me say a nonspecific word about the cast. Tim Burton — via his casting directors — really knows how to pick 'em. Supporting cast members include the wasted hunk, Casper Van Dien (Burton clearly has no interest in life's macho pretty boys), and wonderful character players like Ian McDiarmid, Michael Gough, Jeffrey Jones, Miranda Richardson, and Hammer horrorstar Christopher Lee.

It is obvious that this feature, shot in Britain, is Tim Burton's own homage to those marvelously sinister, gothic horror flicks that poured out of the Hammer Films studios in the fifties and sixties — the kind of atmospheric costume creepers little Timmy grew up devouring. But, for once, a filmmaker was allowed to bring true art (and a decent budget) to a macabre manor house. And it must be said that *Sleepy Hollow* is the most handsome horror flick I have ever seen.

Rick Heinrichs's production design is evocative, to say the least. And DP Emmanuel Lubezki did a brilliant job of shooting the film. Tim Burton is a man who knows the power of black and white cinema. But, after *Ed Wood*, he also knows that modern American audiences won't voluntarily watch monochromatic movies. So, he did

the next best thing. He used shooting and developing techniques that softened color and enhanced contrasts in his photography. The director and his cinematographer were able to achieve a singular visual style, all dark foreboding, deep muted tones, and foggy atmosphere, that captures all the power of black and white photography in a color film.

Frankly, *Sleepy Hollow*'s storyline doesn't live up to the power of this movie's look. But I cannot complain. Even completely superfluous tangents, like Ichabod's nightmares about his murdered white-witch mother (Lisa Marie), were such exquisite flights of filmic fantasy, which segued so nicely with Mr. Burton's overall philosophy, that I felt deeply satisfied following the filmmakers's meandering, gruesome plot.

As with all Tim Burton films, this umpteenth retelling of Irving's classic story has been transformed into a celebration of the nobility of the outsiders and the wounded ones. Johnny Depp's Ichabod is a lonely, fear-wracked ninety-pound weakling. But he is the stuff true heroes are made of. In Tim Burton's world, such a one can save the day and get the girl. What's not to love about a movie like that?

Actually, I realize that Tim Burton is such an idiosyncratic filmmaker that people who are not simpatico with the director's wonderfully warped approach to life and art probably won't enjoy *Sleepy Hollow* half as much as I did. Some folks do prefer a certain shall we call it "consistency" in film style and tone. "Out-of-the-ordinary" is not a selling point to these folks. I wish them joy. And I warn them that they will not take much joy in *Sleepy Hollow*. Nor will they appreciate a quite different but equally extraordinary first feature from director Spike Jonze and writer Charlie Kaufman entitled *Being John Malkovich*.

*Being John Malkovich* is nothing short of a genuinely hilarious (if slightly disturbing) discourse upon the very essence of personal identity. Fundamental issues about the nature of gender and consciousness are presented in the form of a deadpan farce of the first order.

Craig Schwartz (John Cusack) is an unsuccessful puppeteer. Painfully shy, with few social skills, Craig comes to life only when his inner self can be expressed through the storytelling of his lifelike marionettes. But, alas, Craig's inspired puppet pageants hold little mass audience appeal. In fact, his highly

erotic adaptation of "Abelard and Heloise" gets him decked by an angry dad on the streets of New York.

Broke and broken-hearted, Craig is encouraged to pursue more gainful employment by his equally geeky wife, Lotte (an almost unrecognizable Cameron Diaz). Lotte herself has a hard time making a living. She runs a pet store, but ends up adopting more animals than she sells. The small Schwartz apartment is filled with everything from an iguana to a psychically wounded chimpanzee. Just as Craig lives through his dolls, Lotte lives through and for her menagerie. Animals express themselves freely, without shame, just as Lotte wishes she could. And just as important, her creatures comfort by showing no inclination to reject her needy outpouring of love.

The miserable but compatible Schwartzes muddle through life together until Craig takes a job at a "filing" firm tucked away on the 7 1/2th floor of a Manhattan office building and run by an exceedingly old yet quite randy gentleman named Dr. Lester (Orson Bean). Craig's new position as a nimble-fingered file clerk looks like it will be boring — and bad for his back. (The half-floor locale is perfect for life's "little people," but forces

those of normal stature to stoop when standing.)

Life at the Lester Corporation turns out to be anything but boring, however. First, Craig is instantly smitten with a sarcastic and self-confident co-worker named Maxine (indie regular Catherine Keener). Unfortunately for Craig, Maxine's tastes don't run to married nerds with scraggly ponytails. That is, until Craig makes a discovery that looks like a golden business opportunity to Maxine.

When retrieving a fallen file, Craig discovers a secret panel behind a file cabinet which leads to a muddy tunnel which then sucks the entrant, for fifteen exhilarating minutes, into the life experience of actor John Malkovich (Malkovich, himself), before expelling the visitor into a ditch along the New Jersey Turnpike.

Craig, who likes nothing better than submerging himself into an artistic vessel, is thrilled by the experience. (A famous actor is, to him, the ultimate puppet.) But wife Lotte finds the wonderland ride even more of an epiphany. In being John Malkovich she changes gender assignment, and gets a delirious taste of what she feels is her true self. Meanwhile, Maxine, who is perfectly happy with who she is, sees

the magical rabbit-hole as an entrepreneurial goldmine. She has mixed feelings about becoming the love object of both of the Schwartzes, however.

Romantic tangles and plot twists galore will surprise you throughout this unique movie. Such is life, when you open (what Craig rightfully describes as) "a meta-physical can of worms."

Mr. Kaufman's screenplay is an amazing feat: a science fiction film full of deep (and ultimately sad) human truths. It is also two hours of laugh-out-loud fun. Needless to say, a story as odd as this one didn't have an easy time finding its way to the screen. It languished in limbo for several years before Michael Stipe (of R.E.M. fame) and his production partner Sandy Stern "made the call" to get things rolling. Eventually, the cast — including Mr. Malkovich, an essential component — signed on, and production money was found.

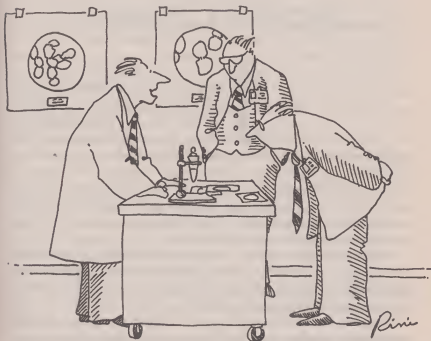
But, of course, the director is the key to unlocking real screen magic. And, in this case, the wizard's name is Spike Jonze. The young man — he just turned thirty — born Adam Spiegel is a professional skateboarder and bike trickster turned magazine editor and music video director. (He is even an

actor. See his performance as Private Conrad Vig in David O. Russell's *Three Kings* for proof.) Jonze had never directed a feature film before this most unusual production. But, without a doubt, he was the right man for the job.

You might expect a music video director to be prone to a flashy, lightning edit directorial style. Nothing could be further from the truth in this case. Mr. Jonze takes an intimate, extremely naturalistic

approach with Mr. Kaufman's fantastical story. And the way he underplays the absurdity of it all serves his narrative, and his characters, very well indeed.

I get the feeling that, like Tim Burton, Spike Jonze will be a singular directorial talent: a filmmaker with his own voice and a true vision. I hope so, anyway. For now, I can only rejoice that we have been given a rare sf film, one with plenty of there there. ¶



"We've isolated a benign strain of *E. coli* bacteria. We call it 'Lassie.'"

*Jim Cambias grew up in New Orleans and attended the University of Chicago. After a brief stint working in book publishing, he spent a decade writing role-playing games. Now he works on a local newspaper in Ithaca, New York, where he lives with his wife (a vertebrate morphologist who occasionally stores odd bits of work in the freezer) and their young daughter (who hasn't yet decided on a career). His first fiction sale is a clever and realistic look at how scientific breakthroughs occur nowadays...and what costs they sometimes exact.*

# A Diagram of Rapture

*By James L. Cambias*

I WASN'T SNOOPING. I'VE read all the advice books and know that children need their privacy. But Tommy had been using the car the

night before, and my keys were nowhere to be found, so I looked in his room.

Unlike the stereotypical teenage boy, Tommy keeps his room fairly neat. Oh, the bed was unmade, but there wasn't any dirty laundry on the floor or used dishes on the desk. A quick glance showed that the keys weren't on his bedside table or the dresser.

I started looking in drawers. Perhaps he had put them away without thinking. The top dresser drawer held nothing but socks, and the desk drawer had been missing ever since my husband bought the thing for his first apartment. That left the bedside table.

The bedside table drawer held a stack of magazines (two copies of *Rolling Stone* covering up a *Sports Illustrated* swimsuit issue and a *Penthouse*; maybe I was snooping just a little), the microphone from an old cassette recorder, a box of colored pencils, some pennies, and a matchbox.



Inside the matchbox were nine little green triangular pills. I knew exactly what they were, too. Efracol. The seduction pill.

After all, I'd invented it.

The name "Efracol" wasn't my doing. Some marketing person at Wellaxo came up with that, presumably by pulling Scrabble tiles out of a hat. Its full name is Dibutyl Catecholandroge, and it first came to my attention during my postdoctoral research at Duke.

My thesis project back at Penn had been on neurohormones — a class of messenger molecules which could function both as neurotransmitters and as hormones. I had hoped that the study of neurohormones might clarify the ancient mind/body problem. I'm firmly a materialist, by the way. I believe that all questions of consciousness and thought can be ultimately answered by the study of the brain.

When I got my degree in 1997, I started looking around for a post-doc position. Morris Fischbein at Duke invited me to join his lab. Morris was a great guy. Most tenured researchers like him treat their grad students and post-docs as so much unpaid labor, to be rewarded with co-author status on a paper along with the other twenty members of the team. Not Morris. He did his own work — wonderful, groundbreaking work on the formation of synaptic pathways — and let the others in his lab do what they wanted.

He was also a fountain of ideas. He once showed me his notebook, an old black grade-school composition book with pages and pages of topics to explore. "I'm not generous," he said. "I'm lazy. I'll never live long enough to do all these experiments. By giving the ideas away, I can find out what I want to know without doing any of the work."

One of the ideas jotted down in his neat print was "EMOTIONS — how does a mental state have a physiological effect? Neurohormones?"

I took that one and ran with it.

Because I would be working on animals, I had to pick fairly basic emotions to study. Shame, loyalty, or jealousy would be too complicated. How do you make a rat jealous? So I stuck to the basics — things like fear, anger, or arousal.

In the end paperwork determined what emotion I studied. Any work with live animals requires a stack of forms a yard high from the Animal

Care people. To make my rats frightened or angry would have needed another three-foot stack. But since rats have sex all the time, I didn't need to fill out any forms beyond the initial load in order to study their mating behavior. So I decided to look for the biochemical basis of arousal.

Years later, Morris told me, "I remember thinking that your project was the kind of thing only a woman would do. Male scientists would be too embarrassed to admit they were studying what makes a rat horny."

If you want the whole story, you can read my *Scientific American* article in the November 2002 issue. Suffice it to say that after three years of work and fifty or sixty dead rats, I had a molecule. Dibutyl Catecholandrogen, or DBCA for short. I could inject a female rat with DBCA and within fifteen minutes she would begin exhibiting all the signs of readiness to mate — ear twitching, lordosis, lubrication. It didn't matter if the nearest male rat was two floors up and on the other side of a concrete wall. Even spayed rats with no uterus or ovaries would respond.

I published my results in the Spring 2001 issue of *Biochemistry*. A week after it appeared I got a phone call.

"Dr. Pickens? My name is Dave Zhao. I'm a researcher up at Wellaxo."

The name was vaguely familiar. The world of science is still a small town. "You did a paper on autocoids at the Gordon Conference."

"That's right. I saw your *Biochemistry* piece about catecholandrogens. Really neat stuff. Anyway, I'm part of a team working on treatments for sexual dysfunctions. Your work sounds like a real breakthrough. Would you be interested in helping us out?"

Researchers in academia always drool over the resources and money available in industry. I tried to sound calm and professional. "I'd be very interested."

So for the next six months I split my time between Duke and Wellaxo, and didn't get nearly enough sleep. Tommy was in second grade at Durham Academy, and Jonathan was trying to earn enough as a reporter for the *News & Observer* to pay the school's tuition, with a little left over for food and the mortgage. My stipend as an outside consultant with Dave's team was a big help.

My real contributions came at the beginning of the project. I showed Dave and his group how to extract DBCA, and helped come up with a way to synthesize it. I had been concerned with how it worked rather than the

structure of the molecule, but the Wellaxo people needed to know how to build DBCA from scratch. My consulting contract ran out in August of 2001, and after that I mostly stayed in touch by e-mail. I was looking for a tenure-track job, I was pregnant with Natasha, and the lab had been invaded by MDs preparing the human trials, so there really wasn't anything for me to do anyway.

The first human trials were done in the spring of 2002. Dave was kind enough to call me up with the results. "It was amazing, Claudia. We had fifty people in all. Twenty women with sexual dysfunctions, twenty healthy women students from NC State, and ten male volunteers. Half of each set got DBCA."

"How often?"

"Weekly doses over ten weeks. And the results were really something! The dysfunctionals went from an average of one sexual partnering every month to once a week. But the healthy subjects all went way up. The weekly average beforehand was one point two. Are you sitting down?"

"Yes, why?"

"The average with DCBA was five point seven partnerings a week for the healthy women."

It took a second for me to process that. "Five point seven? I don't believe it. What kind of dosage were you using?"

"Five micrograms. About two point five parts per billion blood concentration."

The same as in my rats. "My God, Dave. Those women would have to be having sex every night to get averages like that."

"One subject reported an average of *eight point nine* per week on DBCA." There was a note of glee in his voice.

"Jesus. What about the men?"

"They went from an average of one point four to an average of one point eight. And get this — the men in the control group increased by almost the same amount, to one point seven. I'm thinking placebo effect."

"Probably. Did the tablets work out, or did you have to inject them?"

"Oh, the tablets worked great. Very fast absorption — you could almost see it taking effect, especially with the healthy volunteers. Down the hatch, and boom! Ten horny women."

"It worked that way with the rats, but I thought humans might be a

little more restrained. Maybe you should cut the dose for the next round."

"Oh yes. We're making up a batch of two mike tablets, and I'm going to put out a general call for volunteers. We'll run a six-month test, and then the Marketing people want to start clinical trials."

"Clinical trials already? Dave, maybe we should go a bit more slowly with this."

"Are you kidding? Claudia, think of all those aging Boomer women hitting menopause. This could be really big. The Legal people have filed already with the FDA for approval to start. Oh, and Marketing came up with a new name: Efracol."

"Efracol? That's a dumb name. What's the matter with DBCA?"

"Can't trademark it. Besides, you should hear what the techs call it. TFD."

"TFD?"

"The Fuck Drug."

I WAS WAITING for Tommy when he got home (I never did find the car keys, so I wound up calling a cab). He stowed his bike in the garage and came in through the laundry room to the kitchen, where I was sitting.

"Tommy, come here."

He must have caught the note of anger in my voice, because he dropped obediently into the chair opposite mine at the breakfast table. I set the matchbox down between us. There was a pause. I opened it and poured the pills out onto the tabletop.

If Tommy had been really clever, he would have confessed everything right then. But he thought he could lie his way out of it. "Those aren't mine."

"Then why were they in your bedside table?"

"Oh, one of the guys was showing them off last week and left them behind in my room," he said with a great show of casualness.

I sighed. "Tommy, don't lie."

"I'm not!"

"You are, damn it! You shouldn't have the pills, and you shouldn't lie to me about it! This is serious, Tommy — where did you get them and why?"

He sat there, trying to remain poker-faced but blushing scarlet. Finally he said, "I found them."

"You *found* them? That's the stupidest thing I've ever heard! Tommy, this can be a dangerous drug. You could seriously harm someone with it. Now for the last time, where did you get the pills?"

Silence.

"All right, Tommy, that's it. You're grounded. No going out, no phone, no netting. When you're at home I want you in your room unless it's dinnertime. No skateboard team or drama after school."

He got up, still silent, and went to his room. One by one I picked up the pills and put them back into the matchbox.

The first royalty check caught me by surprise. I had signed the patent agreement when I was working in Dave's lab, but hadn't really been paying attention. In academia you think about publications, not patents. But a check for eight hundred dollars is nothing to sneer at, so I put it into the bank and took Jonathan out for dinner to celebrate. The next month a bigger check came. And a bigger one the month after that. People were buying Efracol. At first I was puzzled; I hadn't thought there were so many women with sexual problems.

Evidently I wasn't the only one puzzled. A *Los Angeles Times* reporter named Jennifer Bartholemew spent six weeks cruising the club scene on an expense account and wrote a series of articles called "The Seduction Pill." She discovered that women weren't buying Efracol — men were. They were using it to get women to sleep with them.

The reaction was worse than I'd ever expected. Just about every church came out against Efracol, and so did the National Organization for Women, the Center for Science in the Public Interest, and Greenpeace. All the newspapers printed worried editorials, and *Newsweek* ran a cover story called "Is Science Out of Control? The Efracol Controversy."

For some reason, the reporters weren't all that interested in Dave Zhao or Will Wiener or the other men on the Wellaxo team. I was the one they all wanted to interview. The cheap irony that a woman had "invented" Efracol was impossible for the media to resist.

I managed to duck the television people, but there was one harrowing interview on Pacifica radio. It was a three-way discussion with me in the

local radio station in Chapel Hill, pitted against a bioethics guru in Cambridge and a DEA agent in Washington. The Federal agent was fairly polite, but the ethics man kept referring to Efracol as a "mind control substance" and speculated that it could ultimately reduce women to the status of slaves. Afterward I wondered if maybe that was wishful thinking on his part.

The worst interview was with a girl writing for one of the local college papers. She obviously hadn't read my original paper or the draft of the *Scientific American* piece that I'd sent her by e-mail. The first hour of the interview consisted of my explaining things she should have already known. Then she threw the grenade.

"It all comes down to one question, Dr. Pickens: why?"

"Why? Why what?"

"Why did you invent Efracol? You must have realized how it could be used to harm women?"

"I didn't invent it, I discovered a natural brain chemical which plays an important role in the sexual response of mammals. And I did it to improve our understanding of how the brain works."

"Is that the only reason?"

"What do you mean?"

Her voice dropped low, heavy with faked compassion. "Have you, Dr. Pickens, ever used Efracol?"

That was when I walked out — which was kind of awkward since it was my office. I had to ask the departmental secretary to get my briefcase and my computer. But how could I stay and admit that yes, I had tried it not long after the clinical trials, and that yes, it had made me desperately horny for a couple of hours? Not exactly the white-coated image I like to project. When the story finally ran, it described me as "aloof" and "prickly," and made much of the fact that I was still nursing Natasha at the time.

I did get a favorable column in *Hustler*.

Congress got the FDA to put Efracol on the list of Schedule II controlled substances, available only by prescription. Of course, Congress and the FDA couldn't stop sleazy doctors from prescribing Efracol by the bushel basket to their male patients. Nor could they do anything about the string of clinics dispensing Efracol that sprang up in an unbroken line from

Tijuana to Matamoros. Or the brisk trade in pirate Efracol between Cuba and Miami. Or the dozens of Web sites telling how to make DBCA in your basement with common household chemicals (only two of them were at all accurate; most were simply wrong and at least one was horribly toxic).

There were reports of Efracol parties, with guests taking big fistfuls of Viagra and Efracol (sometimes even both at once). A candy company made millions selling triangular chocolate candies with a green glaze. A mail-order company in Hillsborough came out with little foil packets containing a condom and an Efracol tablet.

In 2003 alone, Wellaxo sold more than a hundred million dollars' worth of Efracol, and one report claimed the unlicensed knockoffs produced in Russia, India, and Colombia made twice that amount. My share of the patent royalties amounted to ninety thousand dollars a year.

Duke offered me an assistant professorship, with a fat salary and a lab of my own. Being a famous scientist has its perks — and a faculty member who's also a potential big-money donor is always welcome at any university. We bought a bigger house right near campus and Jonathan quit his newspaper job to start writing Civil War books.

With funding from my own pocket I could study whatever I chose. I dropped DBCA completely and began researching neurochemicals in fish and amphibians, delving into the chemical evolution of the brain. A nice, safe topic.

**J**ONATHAN GOT BACK at six, smelling faintly of old paper. He had spent the day in the UNC library, reading crumbly letters written by Confederate soldiers. He was working on a book about free black soldiers in the Rebel army, and had been scouring every archive from Richmond to New Orleans for sources.

I met him at the door. "Jon, I found these in Tommy's room." I handed him the matchbox full of pills.

He opened it, studied them for a moment, then looked at me. "Is Tom home?"

"He got back a couple of hours ago. He won't tell me where he got them."

"Hardly matters, anyway. We know he didn't get them from the doctor. Probably one of his friends."

"I told him he was grounded until further notice. What are we going to do about this?"

Jonathan sighed. "Oh, I don't know. Confiscate them, I guess." He started to head for our office but I stopped him.

"This is serious, Jonathan. It's not some amusing little boyhood prank. What if he tries to give them to Megan?"

"I don't know if we should do anything. He's sixteen, for God's sake. You weren't a virgin at that age, and I sure didn't want to be. He'll be careful. After all, he's been hearing about using condoms all his life from school and TV, and I'm sure Megan has, too."

"That's it? That's all you have to say? Good luck and don't forget your condom? Shouldn't we at least tell her parents?"

He took off his glasses and rubbed the bridge of his nose. "Christ. What do you want me to do? Act like some Puritan patriarch and tell him to stay chaste until marriage? Or get Megan's folks to put her in a convent, maybe? This is the twenty-first century, Claudia. There are kids younger than Tom and Megan having children of their own."

"It's not him having sex that I'm worried about. It's the pills. Do you want your son using drugs to make some poor girl want to sleep with him?"

"Some poor girl can make him want sex without pills!" He chuckled but stopped when he saw I wasn't laughing. "And why does she automatically become a 'poor girl' anyway? Is it such an ordeal, having sex with a man?"

Jonathan and I had been married for nineteen years, and I didn't think he had surprised me quite as much since he proposed. I didn't know what I expected his reaction to be, but it certainly wasn't the one I got. "Using the pills to make her want sex is just as bad as forcing her. It's like rape."

"Then why isn't it rape for a woman to get a man aroused? Come on, Claudia, you sound like some of those paranoid editorials. It's a natural chemical, remember? If a boy with an erection and a case of blue balls is supposed to know that 'no means no' after two hours of necking, then a girl dosed with DBCA can refuse just as easily."



"You really don't see any difference? So if Tasha goes to a party with Efracol in the punch and gets gang-raped, it's all right with you?"

That got him mad. He stomped off to the office and slammed the door, and didn't come out until dinnertime.

The first death caused by an overdose of Efracol was in 2004. A girl in Los Angeles drank a lime daiquiri which her date had laced with an entire bottle of ground-up Efracol tablets. In large quantities, DBCA can cause seizures, paralysis, and heart arrhythmia. Within days of her death, the story was going around that she had been killed by the ultimate orgasm. Two cases of self-administered overdoses followed.

A student at Florida State University was raped by eight members of the DKE fraternity after being given three Efracols dissolved in a cup of punch. A high-school girl in Seattle died of internal bleeding after having sex with more than twelve boys in three hours at a party; she had consumed nine Efracol tablets beforehand (along with three hashish brownies, a nitrous-oxide cylinder, and five cups of bourbon).

On Long Island two men and a woman were found to be running a prostitution ring at a cheap motel, using Efracol to recruit girls. The woman invited local high-school girls to "dance parties" at the motel, where they were served soft drinks containing DBCA smuggled in from Cuba. Male "guests" paid a hundred dollars each to attend the parties.

The student orientation packet at Duke began to include a little flyer called "Be Safe! Know What You're Drinking!" It warned female students to avoid mixed drinks or any beverage served in cups. "Drink only from cans or bottles that you open yourself. NEVER let your drink stand open." A friend on the faculty at Stanford sent me a similar brochure, which advised women students simply to avoid eating or drinking anything when men might be around.

It was my turn to make dinner, but I was too upset to cook, so I finally just ordered pizza. It was a very quiet meal. Tommy ate six slices with great efficiency, then excused himself and went back to his room. I couldn't even taste what I was eating. Natasha kept up a running monologue about the rabbits in her classroom at school, and Jonathan listened with polite interest. After dinner Jonathan retreated into the

office again and I clicked aimlessly around the cable channels while Tasha did homework on her pad.

At nine-thirty I supervised her bath and preparations for bed. As we said goodnight I found myself wishing she could stay nine forever, innocent and happy, safe from little green pills.

Though it was not yet ten, I got undressed and went to bed. Jonathan was still sulking in the office. I lay there restlessly, refighting our argument in my head. After a few minutes I just couldn't stand it any more. I got up, pulled on jeans and a shirt, got his keys off the dresser and went out.

I drove around for a little while, not really paying much attention to where I was going. I found myself on 15-501, heading for Chapel Hill, so I followed the road into town and parked in one of the city garages on Rosemary Street.

I walked over to Franklin Street. Students from UNC and all the nearby colleges were everywhere, enjoying the warm spring night. The line at the ice-cream parlor stretched halfway down the block. What I really wanted, I decided, was a drink.

The bar down the street wasn't as crowded as I had feared. To my chagrin the bouncer waved me in without even looking at my driver's license. Inside the crowd was mostly seniors from UNC and Duke, with a scattering of grad students and some actual adults.

I ordered a Bloody Mary and got a seat at the bar, next to a couple of physics students arguing about warp drives. They ignored me as I sipped my drink and watched the room.

There were three young women at one of the high tables along the opposite wall, alternately scanning the crowd and bending heads together for a private conclave. Like most of the other women, they were drinking bottled beer. I noticed each girl kept a thumb over the opening of her bottle when she wasn't drinking.

Two boys with unsuccessful beards stopped by to chat with them. Pleasant nods, dim smiles. The thumbs stayed on the beer bottles. After a few minutes the boys moved on. The girls conferred and laughed.

About twenty minutes later one of them looked at the door and nudged her companions, then waved at a broad-shouldered young fellow with large dark eyes and perfect teeth. He came over to talk, and soon the

girl who had waved was ignoring her two companions, practically hanging on his every word.

She took a sip of her beer and very deliberately set it down on the table, leaving it open and unprotected. A little while later she went off to the powder room with her two companions, leaving the bottle there. The boy didn't do anything to it, but when she came back the two of them went out together. The other two girls stayed behind.

**F**ORTUNATELY for me, fame doesn't last. Occasionally some reporter would give me a call when a spectacular sex crime made headlines, but a policy of refusing all interviews eventually got them to leave me alone. Not that I was ever a public figure. Nobody recognized me in the supermarket or asked me for an autograph.

My e-mail folder still gets about ten messages a week from a hard core of fundamentalist Christians and radical feminists. I can spot them right away, as they usually have titles like "YOUR GOING TO HELL" or "60million women raped eachyear by efracol" or the occasional "Efracol Kills!" I forward the more threatening ones to Campus Security. So far, none of the writers has done anything but threaten.

At parties I talk only about my current research, although invariably some idiot will bring up Efracol and ask me about the latest spectacular sex crime. That's one reason I don't go to many parties.

And I still get a royalty check once a month. Sales of Efracol have leveled off in recent years — the number of legitimate users is fairly steady, and I don't get any percentage of the illicit market. But it's still worth about twenty thousand dollars a year to me.

On nights when the moonlight outside makes it too bright to sleep, I lie awake wondering if it's tainted money. Am I living in comfort because women are being abused? Does Dave Zhao ever feel this way?

Could I have suppressed it? Maybe. For a while, anyway. But I didn't invent the DBCA molecule. It was there all along, in the brain of every mammal, just waiting to be isolated and described.

Maybe I should have looked into the chemical basis of guilt.

Jonathan was in bed when I got back, reading *Smithsonian* and

clipping his toenails. He looked up at me but didn't say a word about my little excursion.

"I'm sorry for what I said this afternoon," I began. "We really do need to decide what to do about Tommy."

"I told you what I think. Evidently it wasn't enough for you. How much punishment do you think he needs? Career opportunities for eunuchs aren't what they used to be."

"Maybe some kind of counseling?"

"There's a real punishment for the kid — make him spend two hours a week in a room with some psych major trying to help him get in touch with his feelings." He looked at my face and his smile faded. "Sorry. But I don't think he needs counseling. I mean, he's a sixteen-year-old boy. He's desperate to have sex. Now offer him a magic pill that will make girls want to go to bed with him; how can he refuse? It's what every teenage boy dreams of. When I was his age I would have sold my soul to the Devil for something like that."

"But it's not *right*!"

"Why not?" Jonathan was getting annoyed again.

"Because it isn't. The pills take away the girl's free will."

"No they don't. No more than deep kissing and blowing in her ear do. Think of it as chemical foreplay."

"It isn't the same thing, damn it! She doesn't choose to take the pills. It's as bad as giving her tranquilizers and then raping her when she passes out."

"You keep calling it rape! Since when is it rape when the woman actively wants to have sex? Was it rape that night after the blues festival? Or in your aunt's basement? Or a thousand other times?"

"But all those times I wanted you because I love you, not because you put something in my drink!"

"Are you sure I didn't?"

For a second I went cold all over. I felt as if I was about to throw up. My expression must have been really something, because Jonathan got up off the bed in a hurry and took me in his arms. "I'm sorry, Claudia. God, I'm sorry. I'd never do that. I'm so sorry," he said over and over.

"I know," I said at last. "You just scared me for a second."

He was silent for a long time, and when he spoke I realized he had been crying. "I get it now," he said. "Tomorrow I'll explain it to Tom."

\*\*\*

The next day Jonathan picked up Tommy after school and the two of them went off to Duke Forest together. When they got home with a bag of take-out barbecue for dinner Jonathan was determinedly cheerful and Tommy was very subdued.

Jonathan told me about it while we were getting ready for bed. "I talked a lot about trust and respect and how using the drug was a kind of betrayal. He didn't know what I was talking about. It turns out Megan was taking the pills herself; he wasn't slipping them into her drink or anything."

"She *knew*?"

"Apparently it's no big deal for them. It's just another chemical tool in the toolbox. Caffeine to stay awake, steroids to bulk up, beer to get silly, and Efracol to get hot. It's like popping a disk into a computer."

"I'm not sure I like that any better."

"Me neither — it's a bit of a shock to hear my wildest teenage fantasy described as no big deal. But I guess it makes sense; Tom and Megan are part of the first generation to grow up with Efracol. It's a whole new world."

"More like a Brave New World."

"Maybe. I don't know. I read him the riot act about obeying the law and being honest. I don't think that will be a problem; Tom's smart about following the rules." He sighed. "He was so practical about it all. I feel old and bewildered."

I cradled his head on my chest. "Would you have tried to slip me Efracol when we were going out?"

"Yes," he said without hesitation. "Do you hate me for it?"

"No." I suddenly laughed. "But it wouldn't have done anything. My brain was steeped in DBCA the moment I met you."

"Scientists are such sweet talkers." He rolled over and gave a sigh. "So in thirty years are Tom and whoever going to be popping Efracol when they want a quickie? Or will this go the way of nose bangles?"

"I don't know." It felt good not to know. I no longer felt responsible. For better or worse, the world could handle Efracol without my help. "Good night."

Jonathan was already asleep. ☞

*Ellen Steiber has written more than two dozen books for children, including a recent collaboration with Terri Windling, The Raven Queen. Her short fiction has appeared in several anthologies, Sirens, Ruby Slippers, Golden Tears, and The Armless Maiden, but this story marks her first magazine publication.*

*"The Shape of Things" is a powerful fantasy. The Guatemalan folktale retold here is an abbreviated version of "The Woman Charcotel," which can be found in Mayan Folktales: Folklore from Lake Atitlán, Guatemala, where it is credited to María Ujpán Ramos.*

# The Shape of Things

By Ellen Steiber

**N**ONIE TELLS ME SHE'S GOING to die. "I'm going to go out soon," she says. She sounds perfectly casual, like she's telling me she's going to the store.

"You're crazy," I say.

She gives me this sad smile. "I wish. Look, I don't know how it's going to happen. Or when. I just know I'm not going to be here much longer."

Nonie is given to making dramatic pronouncements. Last year she told me that Mrs. Socorro, our tenth-grade English teacher, would pay for her sins. Mrs. Socorro got in a car accident that very weekend. Nonie had nothing to do with it. She was at some religious revival meeting her folks made her go to, but she said she had a feeling. That there was a dark aura — like a black halo — around Socorro's head, and she saw trouble coming.

Nonie can tell certain things like that. She sees things other people don't. Ever since we met, when we were five, we've played this game that Nonie made up. It's called The Shape of Things, and what you do is try to see the shapes hidden inside. Like the first day we had Socorro, she was all

smiles, telling us how exciting the English language was, how we were all going to explore it together. After that first class, Nonie asked me what sort of shape I saw inside Mrs. Socorro. I thought about it, and to me she was like a bouquet of fake flowers. All bright colors but nothing real. Nonie said, "She's worse than that. Inside her there's something dark, something that got born out of anger. She keeps it hidden, but you watch — it'll be there in everything she says."

And it was. No one in our class got too excited about the English language, and Mrs. Socorro got mean. Even if she was complimenting you, there'd be this put-down inside whatever she said. It took a while before I realized that whenever I came out of her class, I felt like there was something wrong with me. Like I was dirty. For a long time what I didn't see was that the shape inside her was hatred.

Later, when I heard about Socorro's car accident, I remembered what Nonie said about the black aura around her. And because I'd had too much to drink when I heard the news, it spooked me and I tried to explain all this to my older brother Patrick. But Patrick rolled his eyes and said, "Nonie's just a drama queen with a taste for the Gothic. She couldn't tell you what was inside a cupcake without making it sound dire."

"Well, it is," I pointed out. "All those preservatives and chemicals and stuff. Eat enough cupcakes and you'll get cancer."

"You know what I mean," Patrick said.

So even though Patrick is partly right, and I don't want to encourage Nonie in all this death talk, I'm afraid I might be missing something, so I say to her, "You're not planning to off yourself, are you?"

Last year, three kids from Greenleigh, one of the schools we play in football, made some weird devil pact and then they all drank a lot of beer and shot themselves with their fathers' rifles. A lot of people have guns around here.

"No, of course I'm not going to off myself," she says. "Do I look suicidal to you?"

I look at her. Nonie's pale and skinny, with long, straight brown hair, hazel eyes, and skin that's broken out on her forehead.

"You look the same as always," I tell her.

She gazes around us. We're on the hill behind the high school, where we come to have a cigarette before going home. The hill is actually a

mound of brown dirt. It used to have trees on it, but a developer razed it five years ago to put up a shopping center. The developer went bust and left us with this mound of dirt that looks down on the high school and the road into town.

"I'm going to miss this place," Nonie says. "And that's so weird. It never felt like the kind of place anyone would miss."

"Now I know you're losing your mind." I stamp out my cigarette and start down the hill.

"Cam!" she calls after me. That stops me, because Nonie's the type who never calls after anyone. She prefers you call after her. Her mother's made a lifetime career of it, not that Nonie bothers to answer. Nonie considers her mother an inferior life form.

"Okay. I give." I turn around to face her. "What's happening? Are you sick?"

"Not that I know of." She sits down and wraps her arms around her knees. "I feel like always. School bores the hell out of me and I can't wait to get out, and then I do and everything else bores me, too."

"So...you're dying of boredom."

"Well, yeah, but no more than anyone else in this town." She lies down flat on her back and stares up the sky. It's been windy all day, and the clouds are traveling fast. "What's the shape inside that big silvery one with the jagged edges?"

"A dragon," I say.

"Dragon's teeth, maybe," she agrees. "Something that shreds you." She sits up, and I notice that though she's always been thin, she looks gaunt today, her skin almost transparent. "Cam, I'm going to die. It's not something I want or something I'm planning. All I know is it's going to happen soon. I want to give you my journals," she says. "I don't want my mother to go through them when I'm dead."

That evening Nonie shows up at my house, carrying a cardboard box she can barely lift. I see her struggling with it as she comes up the walk. She has to set it down to ring the doorbell.

By this time I'm downstairs, opening the door. "What is that?"

"I told you," she says. "My journals."

She opens the lid and sure enough, the entire box is filled with spiral-



bound notebooks. She looks around nervously. "Are you the only one home?"

"Yeah, my folks are at that town meeting, and Patrick's over at Billy Hunter's, taking apart his car." I stare at the box. "You actually filled all these notebooks?"

She grins at me. One of her front teeth is a little longer than the others. It gives her this slightly crooked grin. "Socorro always told me I was wordy. Guess she was right."

I look through the box. On the cover of each notebook Nonie's written her name, the word Journal, and the dates she started and ended her entries. The earliest one goes back to second grade.

"Nonie, if you don't want your mom to read these things, why don't you just burn 'em? That way they'll be safe forever."

She smiles when I say that. "That's a good way to think of it," she tells me.

"What?"

"Death. I'll be safe forever."

All this talk of her imminent demise is starting to creep me out. Partly 'cause she's so sure, partly 'cause she's so calm, and partly 'cause I seem to have a role to play in it.

"You're right," she says. "We should burn 'em." She gives me that loopy grin. "Think your dad will mind if we make a bonfire in your front yard?"

"You know he'd have a cardiac if he came home and saw a fire blazing away on our lawn." My father is a fire fighter. "Besides...." Somehow I can't bear the idea of Nonie being gone and me having burned all her journals.

So we push the box up the stairs, and I'm just grateful I'm the only one home and don't have to explain this to anyone.

Nonie seems satisfied when we get the box under my desk. "Remember," she tells me. "No matter what my mother says, or how pathetic she seems, don't let her see these."

"I won't," I say.

"You've got to swear."

"Nonie, you're scaring me," I tell her.

"Swear it!"

So I swear to keep the journals away from her mom in the event of her death. And I make her promise to take the damn things back if she lives to be seventeen.

**F**OR A FEW WEEKS nothing calamitous or dramatic happens. Nonie and I go to school, cut as many classes as we can get away with, smoke cigarettes on the hill. She doesn't say anything more about dying, and I'm figuring it's lung cancer that will probably get us both. I also figure we still got some time on that one. I notice, though, that whenever we hang out Nonie starts humming this little tune. It's not something that you hear on the radio or in music videos.

"What is that?" I finally ask. I can't tell if it's familiar to me because I've heard her hum it so many times or because it's something I should recognize. She sings it quiet, but it's got this relentless beat, like it's pushing something along.

"Don't know," she tells me. "But I started hearing it in my mind right around the time I realized I was going to die. So I figure it's the death song calling me."

"That's it!" I tell her. "You are giving me the willies! I don't want to hear any more about your premonitions or death chants —"

"Death song," she corrects me.

"Whatever. I don't want to hear about it."

She takes a last drag on her cigarette and crushes it beneath her boot. "Fair enough," she says. "I won't talk about it anymore. Talking can't change anything anyway. But I figured you knew. I figured you saw the change."

My heart is hammering now, and the hair on the back of my neck is standing straight up. "What change?"

"In my aura," she says. "There always used to be this fine blue light around me. And bit by bit, it's getting darker. Won't be long now before it goes black."

I look at her. She's got her back to the setting sun, so there's kind of a red glow in the sky behind her.

Her voice sounds surprised when she says, "You don't see it, do you?"

I shake my head. "I never could. I don't even know if all these auras you're always seeing are real."

"They're real, all right," she says so soft I can barely hear.

"So this death of yours," I try to keep my voice steady, "do you see a shape for it?" I'm imagining auto accidents, drive-by shootings, fires, movie-of-the-week hospital diseases.

She smiles. "That's the weird thing," she says. "I do. I mean, I have for a while, and it's shaped like a big cat."

That actually calms me down. There aren't any big cats in this part of the state. We don't even have a zoo. I figure for Nonie to get eaten by a big cat, she'd have to hop a plane to Central America.

She kicks at a piece of broken beer bottle on the ground. "I got a secret," she says. "For a few weeks now. Want to hear it?"

I am wondering how I ever wound up with someone who's so completely exasperating for a friend.

"I am not going to pry it out of you," I say. "Tell me if you want, or don't."

Nonie starts to laugh. "I got a boyfriend," she says, "a real, honest-to-goodness boyfriend."

Turns out Nonie's boyfriend is Miguel Alvarez. He transferred into our school late last year. No one really knows him well. Miguel not only keeps to himself, but every few weeks he up and disappears for a day. His homeroom teacher is always giving him lectures on truancy.

Miguel is not the type you'd think would go for someone as quiet as Nonie. Miguel's beautiful. He's got this thick, glossy, straight black hair that he wears down his back. He says he's part Guatemalan, part Apache, part Swedish. The Swedish is a little hard to figure, but Nonie says it accounts for why he's not fucked up about sex.

Nonie and I both did it with boys as soon as we turned sixteen. Mostly to have it done and over with. Sex is not what I'd call a big deal. Nonie's theory is that most guys our age don't really like sex, and they don't even like girls. They just like the rush and they need to be able to brag about it later.

Miguel, she says, is different. She says he's real gentle with her. Never rushes things. Loves being close after. Always makes sure she has as good a time as he does. Which is all a little surprising, considering Miguel's rep. Even the gang members in our school, the ones who carry, keep a careful,

respectful distance around Miguel. I always figured he must pack some major heat of his own, but Nonie says it's not about that. It's something inside him, something they know better than to go near.

Nonie calls me up on Saturday morning and asks if I want to go to the quarry with her and Miguel. The quarry is one of the few decent things in this area. Years ago, they cut granite from the earth there. Since then it's filled up with water. Of course, there are signs posted all over, telling you it's private property, no trespassing and definitely no swimming, but it's become the generally acknowledged swimming hole anyway.

So Miguel drives us to the end of the road that leads to the quarry. He's got an old pickup truck and we sit three across the front seat, Nonie wedged in between me and Miguel, and the two of us so close that our bare thighs stick together.

It's the first time I've really hung out with Miguel. And I'm curious about him but also self-conscious. I know it's crazy, but I want Nonie's boyfriend to think I'm okay.

We climb over the padlocked fence and walk down the dirt road a ways until we reach the trail through the woods. I'm carrying a towel and wearing a bathing suit underneath my cut-offs even though it's all of seventy-four degrees out.

The trees suddenly open out onto the quarry. It always takes me by surprise. You're in thick pine trees one minute and the next, you're looking out on a pool of deep glassy water, edged by granite cliff.

*"Paraíso,"* Miguel says softly.

I've had enough Spanish to know he means paradise, and while the quarry is about as scenic as things get around here, personally, I would never use that word to describe anything in this town. Besides, last year Bobby Sexton, a senior from our school, drowned in the quarry. The thing is, you're supposed to dive into the water from the highest point on the rock. It's one of those stupid dares that we all go along with, even though everyone knows that if you dive from that point and you don't hit the water just right, you hit granite. That's what happened to Bobby.

Me and Nonie and Miguel find a smooth spot on the rock that's got an oak tree arching over it. Miguel pulls a nubby, plaid blanket from his pack. Nonie stretches out on it, gazing into the branches. She's wearing

cut-offs and a white camisole that rides up on her rib cage. I sit beside her, have a cigarette, and watch as Miguel cracks open a beer and carefully lets one drop fall on Nonie's bare stomach.

She doesn't react at all, not even when he licks it from her skin. I'm wondering if this is something I should be watching. But I can see she's completely at ease with him. Like she's known him forever.

Nonie closes her eyes and I open a can of soda. Miguel drinks his beer, one hand resting on her upper arm, his thumb stroking her skin. For a long time no one says anything. I listen to a fly buzzing, study the shadows in the trees, and I think I see something moving in the pines.

Miguel sees it, too. His dark eyes follow the flicker of movement. "It's hunting," he tells me softly.

"What is?"

He answers with a word in Spanish that sounds like charcoal, then says, "Don't worry. It won't come near us. Not now."

He lies down beside Nonie, soaking in the cool sun, one hand cupping her hipbone. He is so still I almost forget he's there. I'm watching Nonie, making sure that her chest continues to rise and fall, hoping that this is just a nap and not a sign of some fatal disease.

And then suddenly I start thinking about Bobby Sexton and I get really scared.

"Nonie," I say loudly. "You can't go in the water."

"Why not?" she asks.

She sits up and rubs tanning oil onto her arms. Her hair is hanging loose, hiding the side of her face.

"Because that's how it's going to happen," I say. "We're all going to dive in there. Only you won't surface. Don't you see?"

Nonie works her hair into a French braid. "I don't think so," she says calmly. "It's too cold for me to swim. That's not how it's going to happen."

"I thought you didn't know how," I say.

"I don't," she tells me. "But I know that's not the shape of it."

"Cam." Miguel's voice is drowsy. "You play this shape game, too?"

I don't answer him. Because Nonie and I have this unspoken pact to never tell anyone else about the game. Except, I realize, obviously she's told Miguel. It makes me feel funny inside. Like something got betrayed.

"Cam," she says. "I didn't tell him. Miguel just knows things."

"The way you just know things?"

She nods. It makes me feel left out, excluded from the Gifted Psychics Club.

"Well, I guess that's why you two get on," I say.

Miguel opens one sleepy eye. "*Loca* girl," he whispers.

I sort of lose it at that point. "Did you tell him?" I demand. "And does he know that you think you're about to die?"

Miguel gets to his feet and gives me a sympathetic look.

"I'm going in," he says. He walks into the trees, vanishes in their shadows, and reemerges at the high point of the cliff. Quickly, carelessly, he arcs out over the water and enters it in a smooth, perfect dive. I hold my breath for a long moment, praying he'll surface. He does, his black hair clinging to his skin like a pelt. Nonie, her eyes closed again, doesn't watch any of this.

"We made love last night," she tells me as he begins swimming the length of the quarry. "In St. David Cemetery."

"That is so completely macabre — "

"No, it was beautiful — the gravestones were all glowing in the moonlight. And it was comforting. When I first really understood that I was going to die soon, I was so scared. And gradually that's gone away. In the cemetery with Miguel, the last of the fear left me. I felt...at home there."

"Well, I feel sick when you talk this way," I tell her. "I hate it! I see you and you start telling me how you won't be here much longer and — " I can't finish because my nose is running and I'm blinking back tears.

Nonie takes my hands in hers. "Listen to me, Cam," she says. "I'm not trying to scare you. I've only been telling you because I want you to know that it's not frightening for me. I want you to be okay about it, too."

"Well, I'm not." My throat is burning and the words come out ragged.

She puts her arms around me and holds me close. "You have to be," she says. "You have to be."

About a week later at three A.M. on Sunday morning, Patrick wakes me up. "The police are downstairs," he says. "They need to ask you about Nonie."

I get up, my heart locked with dread. This is it, I think. She's gone.

And she is. The police are responding to a call from her mother. Nonie went out with Miguel on Friday night. She never came back. In fact, no one can find Miguel either. The police ask me if I think they might have run away together. Or could it be another one of those crazy suicide pacts?

I tell them I don't know. They ask me where I'd look for her. And I see all the places where we used to go together — the park when we were little and mad for the swings, the vintage clothing boutique where we both bought antique silk slips, the hill behind the school. And I know they won't find her in any of those places.

Forty-eight hours later Nonie and Miguel are both officially declared missing. It comes out later that week that everything Miguel gave them was a lie. The address he gave the school was false, along with his phone number. He had no driver's license or insurance, and the state didn't have a record of his truck. His locker at school was empty. It was like Miguel Alvarez was someone we all imagined.

But Nonie...Nonie was real and was really gone.

Two weeks later they dragged the quarry. Nothing in the water except an old, rusted Corvette that a drunk college boy drove in there years ago.

So Nonie's mother declared that her "no-good daughter and that Spanish boy" had run away. That one day Nonie would be back, probably pregnant, and then she'd better pray for Jesus and Mary's mercy because her parents weren't going to have anything to do with her.

I was the only one who was certain Nonie was no longer alive. Until they found her body in the woods that led to the quarry. Her neck was torn open. The rest of her body was untouched.

I miss her so much. I've been screwing up in school, fighting with my folks. I keep wanting to talk to Nonie and I can't. It is months before I'm finally able to open the box with Nonie's journals in it. I start with the most recent one. It begins like this:

Today I saw Miguel for the first time. We recognized each other at once. He scared me at first — until I saw the warmth in his eyes. He took my hand, led me outside, said, "You know who I am, don't you?"

I just nodded. My voice was gone. I'd been expecting something. I just never dreamed it would be in the shape of someone as beautiful as Miguel.

"Don't worry, I will make it easy for you, *querida*," he told me. "There is nothing to fear."

We walked up to the hill behind the school and sat down in the place where Cam and I always sit. Then he said,

"In my mother's village, in Guatemala, they know that certain people are born with powers. You already know this for yourself, *querida*. They believe that when we are born into this world, there is also an animal, a *nagual*, born into the underworld, and we share the same spirit with that animal. Some people, the ones with powers — one minute they are human, the next they become their animal spirit. You understand?"

I knew what he was telling me. I said, "You have an animal inside you." I couldn't see the shape of it yet. But I sensed it there, its heart beat matching his, its strength and wariness coursing through his body.

He ran a hand down the side of my face and let me look into his eyes for what seemed a long time. I still couldn't quite see it. So he went on. He said that sometimes the *nagual* is more than *nagual*. It is *characotel*, the one who shifts shape to carry the spirits of the dying to the *Dueño de Muerte*, the God of Death. It is the *suerte*, the fate of the *characotel*, that every twenty days he or she must journey to the *Dueño* and tell him how many people are going to die.

Then he told me this story —

*There was a woman characotel, and she married a man who didn't know her true nature. But he soon noticed that she was sick all the time. This was because she wasn't bringing enough spirits to the Dueño of Death. The characoteles feed on the bones of the dead, and she wasn't getting enough of these bones. She was wasting away. The husband tried to get her to eat, to give her medicines, but she wouldn't take a thing. This made her husband very sad. Finally, a neighbor asked what was wrong; was he fighting with his wife? No, the man answered. His wife was getting weak and thin and she refused to eat with him. That is because she is a characotel, the neighbor said. She*



goes every Wednesday and Friday night to eat bones at the cemetery. You must follow her and you will see for yourself.

So the husband did as the neighbor advised. He followed the woman at night to the cemetery. And he heard her speaking to the Dueño of Death.

The next morning the husband told his wife they were going to eat breakfast together. She refused, and he accused her of being a characotel. So the characotel turned her husband into a dog. That Friday night the dog followed her to the cemetery. And the wife explained to the Dueño of Death that she punished her husband so that he would not tell anyone about her. The Dueño said that he would change the dog back into a man, but he warned the man that he would die if he told anyone what he had seen. The man agreed, but he returned home deranged, unable to work or even dress himself. The woman characotel soon sickened and died. The Dueño took her life because she was not a good worker for him. It was only after the husband told the people of his pueblo the whole story that he was cured.

"So do you know why I told you that story?" Miguel asked.

I thought, I know why every three weeks you disappear from school...every twenty days the *characoteles* report to the Dueño of Death. But what I said was something dumb, like, "You're warning me that you'll turn me into a dog if I tell on you?"

And he said, "No. I want you to know that with my kind — it is possible to stop us."

"And then you'll die instead of me," I said.

He shrugged. "I will take my chances with the Dueño."

So I took his hands in mine and I looked into his eyes again. They were so dark. From another place, another time. Below us, on the road, I could hear the sounds of the traffic. But in his eyes I saw forests. I could smell the damp earth after a rain. I could hear birds calling, feel lizards scuttling along the leaves. And I could feel him moving through the trees, not as a human but as a *nagual* with the soft, rippling tread of a jaguar.

"No," I told him. "I'm not like that man in the story. I'm not frightened of you."

"Bueno," he said. "Then we will have some time together before I take you."

So I am going to have time with Miguel....

I read more of the journal. And I see how she snuck out of her house nearly every night to be with him. It amazes me that I never knew. I mean, I knew they were lovers. I never guessed at what he truly was. But Nonie saw the shape inside him. And he saw all that was inside her.

Nonie's very last journal entry is a short one:

Miguel says it won't be long now. And that's all right. I'm ready. Eager, even. I worry about Cam, though. I don't know how to take away her fear. But I think that maybe like the husband in Miguel's story if she is able to know the whole truth and then tell it, she will be all right.

So, Cam, if you are reading this, remember: what's inside us can take so many forms, and there is beauty even in the ones that seem most frightening. Know that when I'm gone I'll still be there for you. In certain songs. In the shadows. Whenever you see the shape of things.

— for Tania Yatskievych who gave me the seed of the story,  
and Erica Swadley who set it in motion.





# A SCIENTIST'S NOTEBOOK

GREGORY BENFORD AND  
GEORGE ZEBROWSKI

## LIVING IN SPACE

**T**HE GREAT scandal of our Space Station Freedom, a building now, is not really how much it will cost. Projections show that if it gets fully built out and maintained for the design lifetime of twenty years, it will run about \$96 billion.

As if that were not bad enough, we stand to learn very little from the experience. The International Space Station, as it is diplomatically called, will not truly teach us how to live in space; instead, we'll camp out.

It cannot be a closed-cycle biosphere. Its food and water will come up in heavy boosters and be discarded as waste by pushing it back down into the clinging atmosphere. In fact, the whole space station is a hotel perched just above the thin skin of air, so that every year the Russians will have to boost it back

into its orbit, or else it will burn up.

Yet with it ride many dreams — apt to be dashed by experience, I fear. Our space station will not bring the fresh perspectives that more than a century of visionaries have glimpsed, as I described last time.

For a time in the 1970s and early 1980s, the popular press and many scientific and technological publications carried articles and pictorial visions of space colonies. Bernal Spheres, O'Neill Cylinders, and hollowed-out asteroids showed us parklike and urban environments floating in space, offering secular heavens to the masses of the dying Earth.

If it came to a choice between a finite planet, zero population growth, restrictive social regimentation, and rationing of ever dwindling natural resources on the one hand, versus the openness of free

space on the other...well, space settlement seemed about to take on the classic proportions of an idea whose time had come.

There would be problems, but at least they would not be our current problems.

Many thinkers argued that here was an economic high ground worthy of culture and technology, that when taken would lead to a permanent, mature civilization. Space settlements were that high ground, the visionaries insisted; but we would have to build them before we could be certain of success, which in human affairs was never guaranteed.

But to wait for the right time might mean waiting forever, risking a decline from which humanity might never recover. History has a consistent record of the good happening alongside the bad; to hesitate might be disastrous, hurling us into the irreversible decline of Arnold Toynbee's two dozen failed civilizations, with no new ground upon which to begin again. Such was the argument against the "prioritizers."

Asimov wrote to the skeptics:

I have received a number of letters concerning my article 'Colonizing the Heavens.'

Some call it fiction. (Real nonsense, I suppose, like reaching the Moon.)

Some say I am trying to subvert the doctrine of Zero Population Growth. (As though it weren't possible to try to colonize space and stop the population growth, too. They are not mutually exclusive.)

Some say it is too expensive. (Not if the world stops supporting military machines.)

Some say that nobody wants an engineered environment. (Nobody? How many people are living in caves these days?)

Some say that nobody would ever want to cross space in three days to live in a space colony. (This from people whose ancestors two or three generations back probably crossed the Atlantic in steerage, or crossed the western desert in covered wagons.)

Some say that Third World people would never go. (Sure. Only aristocrats fled to the New World. All the tired, the poor, the huddled masses yearning to breathe free never came, did they?)

Some say let's solve our problems on Earth before we try to colonize space. (Someone said that to the Pilgrims. Come on, they said, let's solve our problems right here in Europe.)

Classic stuff. For Asimov, colonies were not primarily technological feats. He echoed the prevailing historical sense of this age: that frontiers have shaped our world by unleashing new ideas with the European explosion outward. These ideas might have died except for the unrestricted ground of the frontier, where the old cultures could not kill them with preemptive criticism and outright suppression.

Space was to be a ground for change, not just suburbs in vacuum. The advocates for skylife did not just want to build castles in the airless, but on the firmest of economic foundations — the great wealth of our sunspace.

We are living through a time when grand experiments seem daunting. Yet space stations promise something different — social spaces where new ideas can bloom.

From the beginning, space colonies were advanced not only with the assertion that they were possible,

but also out of a concern for the future welfare and survival of humanity. Tsiolkovsky wrote in 1912:

"To step out onto the soil of asteroids, to lift with your hand a stone on the Moon, to set up moving stations in ethereal space, and establish living rings around the Earth, the Moon, the Sun, to observe Mars from a distance of several tens of versts, to land on its satellites and even on the surface of Mars — what could be more extravagant! However, it is only with the advent of reactive vehicles that a new and great era in astronomy will begin, the epoch of a careful study of the sky.... The prime motive of my life is to do something useful for people.... That is why I have interested myself in things that did not give me bread or strength. But I hope that my studies will if not soon but perhaps in the distant future, yield society mountains of grain and limitless power."

After Tsiolkovsky, arguments over purpose continued: the whole point of space settlements was to build living, self-repairing and reproducing, potentially mobile environments. These would follow the model of natural homeostasis, not the model of social prosthetics, as cities are to a large degree. All crude forms of technology are historically

just temporary aids. A responsive social organism is not a slap-dash effort to fit nature with peg legs.

Physics has its place in space settlements, but the crucial sciences supporting a civilization in space are biological and social sciences. The greatest return will come not in purely technological advances but in the psychosocial benefits of a revitalized humanity. Gerard O'Neill wrote in 1976:

...I believe that our children will judge the most important benefits of space colonization to have been not physical or economic, but the opening of new human options, the possibility of a new degree of freedom, not only for the human body, but much more important, for the human spirit and sense of aspiration.

This thought echoed both Arthur C. Clarke's view of space exploration as beginning a new human cultural renaissance, and the views of many social thinkers and scientists, who have warned that a society must not be an end in itself. Organization, with social groups as with living organisms, is double-edged: a secure system may simply consume and repeat itself endlessly.

When a society has no prophetic dreams, there is no creativity.

One of the charges leveled against both scientists and science fiction writers is that their visions of possible futures have been consistently too conservative. "Skylife" beckons to many because it has such vast physical potential.

Picture thousands of space settlements, ranging in size from a few kilometers to a hundred kilometers or more in diameter, orbiting the Sun, catching our star's energy in an urban shell of space habitats. The societies are pluralistic, constantly diverging in design and philosophies. New ones are being born as population increases. Some even leave the solar system to explore other sunspaces.

Now jump even further ahead: space settlements, spomes, or macrolife (whatever they may be called) are the dominant urban civilization in various sectors of our galaxy. Planets are considered the galaxy's countryside. Some habitats are mobile; others stay at home and surround various stars in what has been called a Dyson Sphere (after the physicist Freeman Dyson), which can be designed as a porous shell of small worlds—not a literal solid sphere, which would collapse at its poles, even if spun to offset

gravity. If one were to build only the equatorial belt, then we have Larry Niven's *Ringworld*.

Asteroid-sized worldlets need not be cramped spaces and metal corridors—or small, compared even to planets. As Isaac Asimov described in his 1956 story, "Strikebreaker":

We are not a small world, Dr. Lamorak; you judge us by two-dimensional standards. The surface area of Elsewhere is only three quarters that of the State of New York, but that's irrelevant. Remember, we can occupy, if we wish, the entire interior of Elsewhere. A sphere of 50 miles radius has a volume of well over half a million cubic miles. If all of Elsewhere were occupied by levels 50 feet apart, the total surface area within the planetoid would be 56,000,000 square miles, and that is equal to the total land area of Earth. And none of these square miles, Doctor, would be unproductive.

The doctor from Earth, who has come to study a humanity that "had burrowed into that miniature world and constructed a society in it" is surprised that "he had never

thought of it that way." And yet Asimov's conception may still be seen as conservative, when one considers mobiles hundred of kilometers or more across, with spacious skies, and the ability to reproduce.

Surface area depends on the square of a given distance, while volume depends on the cube. This simple fact means that honeycombing an asteroid provides immense livable room.

If the chunk of rock has a typical size  $R$ , then one can riddle it with levels for habitation, each separated by, say, a typical distance  $H$ . Simple geometry says that the living area of such an enormous apartment house would be of order  $R^3/H$ . People need head room of about two meters, and a bit extra for structural support and piping in air and fluids. Probably this sets the net spacing of living levels at a number like  $H=4$  meters.

We can then ask how big an asteroid need be to give us living room equal to the entire area of the Earth, even including the oceans. That is, we set our  $R^3/H$  equal to the surface area of the Earth,  $4(\pi)R_e^2$ , for a radius  $R_e = 6,300$  kilometers. Plugging these numbers in and solving, one finds  $R$  is about a hundred kilometers. This is remarkable, for there are many asteroids of

such size; the largest, Ceres, is 380 kilometers in radius.

A Dyson Sphere or Ringworld would have the surface area of millions of Earths, by spreading the surface over a giant sphere or ring.

The idea of all humanity living inside a rock only about two hundred kilometers in diameter sounds wildly improbable...at first. But the scaling emerges because of the cubic increase of volume with size. Our hidden assumption, of course, is that unlike on the Earth's surface, one could settle people inside and still supply the needed air and light. Sunlight drives our earthly environment's engines; an asteroid colony would need some power supply. At most, the power needed would be comparable to that received by the Earth as sunlight — about  $10^{17}$  watts, an enormous figure compared with the  $10^{13}$  watts the asteroid would receive in sunlight at the same distance from the Sun.

But of course the colony would not need all that energy, nor would it be able to shed the waste heat generated from it after use. On Earth a person in an advanced nation uses several kilowatts steadily, so five billion people would require perhaps  $10^{13}$  watts, just about the incoming sunlight. These numbers

are crude guesses, but they give some idea of the scales involved.

Most habitat stories feature an obligatory walk-around-the-artifact scene. A common game played down through the decades was the my-artifact's-bigger-than-your-artifact competition. Sheer scale is an easy way to evoke awe. But space habitats can use cold engineering triumphs to evoke dainty beauty. While space is vast, those living in it may inhabit, if not cramped, then firmly bounded preserves. What would such limits do to the shadowy depths of our psyches?

Nobody knows. Asimov had agoraphobia, a fear primarily of heights, and a dislike of open spaces. His Trantor feels like living in a series of New York apartments, so it is not surprising that he thought in terms of packing people into a volume. Could people truly live that way? Most city denizens seldom note the sky, but long-term disorders may emerge from prolonged groundhog living; we do not know, because few choose to live that way on Earth.

Using the volumes of all the known asteroids would yield a new equivalent land area of about 3000 times Earth's total surface. This suggests that material limits are not primary in determining the pos-



sibilities open to humanity; social goals set our ends.

A sprawling, sunspace civilization would not be resource-limited, unlike human societies throughout history. It could live for influence and curiosity, for the power to educate and persuade. Knowing and creating would become more important than economics and personal power. Style and novelty would rule within a stable economic container that would support an endlessly developing string of cultures.

Karl Marx and Adam Smith would both be subsumed, because economics become truly basic — and irrelevant. Thomas Malthus would be circumvented, because there is a Peter with practically infinite pockets who can be robbed to pay Paul.

In this seemingly utopian vision, one nevertheless entirely achievable by all that we know of physical reality, poverty is possible only on emerging regions — which must go through their own rites of passage, their own quantum jumps into self-sufficiency — and no one can help them without doing irreparable psychosocial damage. Our human history may very well be at such a critical juncture now, with only our reason and creative imagi-

nation to draw us out of the cradle that might become a tomb, if we delay.

Perhaps this description holds the answer to Fermi's Paradox, which asks: If the universe is full of intelligent life, then where are they? One answer may be that most cannot visit us because they are held back by the forbidding economics of interstellar travel; and that those that can will not.

Another answer contends that the rise of reason leads to catastrophic modifications of the environment, both external and bodily, and the species perishes. Those that reach a subtle stage of rational development without destroying themselves, or that are not destroyed by natural disasters, have no interest in contacting lesser species. The advanced ones converse only with those of their level of achievement, if at all, since such dialog may pose dangers.

A bleak view. Or perhaps nearly all intelligent cultures in our galaxy are still provincials in space and time, in their sense of history and grasp of technical possibilities. The answers to Fermi's Paradox are likely to be many, but they seem different in light of sunspace's potential.

Our dilemma is clearly posed

by human history: intelligence is at first an innovation, then flares into conflict with its environment, then threatens its environment and itself.

If it fails to get past this crisis of "first technologies" and does not grow into a more benign relation with its environment, human intelligence will destroy itself — if not through warfare then through some complex mistake. Skylife may be part of a more productive and satisfying environment for human intelligence — a new adaptation, if we can seize it. But humanity is psychologically frail; failure is the basic theme of our literature and politics, which often regard rationality and creative visions with derision and skepticism.

So does skylife imply unending utopia?

"People who live on planets think small," Larry Niven has written, and we must remind ourselves what small means. An average household today commands more horsepower than kings once did. To classify possible civilizations by energy use, as the Russian astrophysicist Kadarshv has proposed, yields a striking perspective: Type I civilizations use the available energy of their whole planet. Type II

use the output of their whole sun. Type III harness the power of a galaxy.

We are not even Type I. The possibilities for growth are endless, since the space settlement is a container waiting for a variety of social forms, an economic base for ongoing creativity supported by a high-energy, open-ended industrialism that escapes the restrictions faced by planetary cultures. The mobile space habitat cannot easily die. It is the true fulfillment of the aims of space travel, the ultimate consolidation of gains made by exploiting the space around the Sun. The view from even our cramped, fledgling spaceships has led us to see the planet as an ecological ship circling our sun, and to imagine building worlds from scratch. We have been doing so since civilizations began, in the form of towns and cities, but we have not had enough energy and resources to make our surface habitats work as well as they might.

The idea of space settlements has been decried as technocratic hubris. But nay-saying in the face of solidly based economic and technical challenges leads to social and economic impotence. Like the opening of the Americas, space demands long-term thinking.

Reflect that a century passed

between Columbus and the first true colony in the New World. Here in the opening decades of a similar epoch, we cannot see any intrinsic limits to sunspace's potential, except possibly psychological ones. It may be that an energy-rich Type I or II culture would face extraordinary problems in the use of its powers, but not in having them. One of the problems might lie in a dangerous scarcity of rebels and critics, because everyone will be so comfortable. (Indeed, does this describe present-day Europe?)

There will certainly be new problems from causes we cannot foresee. Yet we can grasp that the future perfection of our world's problematic industrialism is possible only through an expansion of our horizons, not by shrinking from them. The objections of those who fear that the future may differ from the near past stem from the realization that today's network of familial and corporate power structures may come to an end.

Human problems may crumble before human ingenuity, which is always at first a small thing of thoughts and words, dreams and mistakes. Even honestly motivated critics serve only those who fear the loss of their power and influence in economic and political arenas; they

put on the brakes by asking for guaranteed cost projections, for assurances that there will be no mistakes (which means there will be nothing to learn from, no feedback).

Objections that ask for this kind of warranty make a well-known logical error known as "the counsel of perfection," which does not recognize degrees of success and therefore seeks to ban any consideration or test of an idea. No demand could place a deadlier obstacle before human creativity.

What can we learn from the social sciences about this?

In *Cannibals and Kings: The Origins of Culture* (1977), anthropologist Marvin Harris described how technical efficiency depletes resources, precipitating either a sudden decline in a culture or a new level of innovation, which then repeats the same process; but he is ambivalent about the overall pattern of entrapment and futility suggested by his model. Certainly he saw little point in living outside the atmosphere, even if that opened resources.

Historian of science Bernard Cohen answered him in this way:

"Harris assumes that there have been centuries of post-feudal mechanization and scientific engineering. He doesn't recognize that

large-scale innovations in engineering and technology based on advances in fundamental science are a recent phenomenon, barely a century old. It is thus an open question whether future societies may not exhibit a really different growth pattern (even with respect to ecological and reproductive pressures) from that of all previous societies since science has revolutionized the mode of making technological innovations. In any event, as Harris observes...evolutionary theory may make us aware of the 'determined nature of the past,' but it does not provide the basis for the determination of the future. Admitting that the 'intensification of the industrial mode of production undoubtedly portends an evolution of new cultural forms,' Harris concludes that he does not 'know for certain what these will be, nor does anyone else.'"

Our energy-rich sunspace can be exploited through the extension of planetbound forms of social organization, in ways we cannot predict. To give up on catching even a glimpse of the possible patterns is to deny the presence of genuine novelty in history — creative synergies that confront societies with new factors. All shall surely increase as human history acceler-

ates.

The exchange between Harris and Cohen is typical of many such debates and suggests a real failure of humanistic culture. Consider that Harris and others who continue to speak do so at a time when the models for creative alternatives — space habitats being only one example — are proliferating in a staggering explosion of human creativity; and this explosion of speculation really began only in the 1970s. Some of these ideas, as Carl Sagan suggested, may become productive social paths.

Many have argued that the word utopian should be used not in the pejorative sense but in the dynamic sense, as H. G. Wells redefined the word to remove its association with the fear of a static, totalitarian perfection. Wells was foremost a critic of progress who hoped and then, after trying to do something about it by educating the world, gave up hope. He is a sobering reminder of what happened to the widespread optimism pervading the Europeans at the turn of the last century.

Isaac Asimov, Carl Sagan, and Jacob Bronowski played this same role of educator in more recent times, struggling with the grim spectacle of human failure and incompetence. Wells felt that it was the

fate of all so-called utopian visions to be more or less misread — and he urged not static perfection but dynamic, critical methods that would thrive on change and nurture its creative directions. In *A Modern Utopia* (1905) he wrote that "the state is for individuals, the law is for freedoms, the world is for experiment, experience, and change: these are the fundamentals upon which a modern Utopia must go." It is no wonder that the totalitarian Lenin "felt sorry" for Wells during their meeting, since Lenin's view of human nature, and Stalin's after him, was that of a mad dog wearing a muzzle.

There are deeper constraints at work, say the critics of a more imaginative, risk-taking creative reason. The case for optimism is based on the fact that nature is vast and infinitely rich; and once we widen our field of economic operations off the Earth, there will be no limits to growth or the use of energy. The case for pessimism accepts the vision as possible, but states, sometimes very convincingly, that human beings may not be able to make use of the possibilities that wait. Because of our flawed nature, we will cower in our little corner of the universe and be unable to control ourselves sufficiently to reach for the riches

around us. Cruel inner realities will stand against our desire for change. Some read this in the currently raging battles over sociobiology: we are chimps and had better get used to that revelation.

What will actually happen? Much depends on how it actually feels to live in space. Will adapting to zero-g prove possible? Will we find it useful to convert our legs into extra arms, as Lois Bujold envisioned?

The debate will never end between those who see only problems and those who see the heights — until some specific examples are explored in fiction or, better, in experience.

On one side we have the writer Norman Spinrad's acid comment, "Living in a space colony would be like being at a science fiction convention held aboard a nuclear submarine...forever!" He was talking about the kind of scaled-down spacehabitats that might be built after the politicians were through cost-cutting.

On the other side we have simple, eloquent gestures. In 1997 a thimbleful of Gerard O'Neill's ashes was lofted into orbit in the first commercial "burial," though in their low trajectory they will reenter the atmosphere within a

few years (a fiery Viking funeral after all?). His ashes flew with those of Timothy Leary, another dreamer.

America was the first truly sophisticated, self-aware, fresh beginning in humankind's brief recorded history. Why do we not have space exploration and expansion at the level of past imaginings? Are recent human generations simply too tired and unequal to the task? Perhaps. But most of the answer comes down to money and fear.

NASA has not yet done an experiment trying centrifugal gravity — a staple idea of skylife. The International Space Station will try very few innovations. Until a livelier spirit animates the official space program, the tough jobs of getting into orbit cheaply, and living there self-sufficiently, will probably have

to be done by private interests who can angle a profit from it.

In the meantime, we can imagine. "Science is my territory," writes Freeman Dyson, "but science fiction is the landscape of my dreams." The loop of science fiction, speculative foresight, and the sciences is the way we dig out what is implied by nature and by our human natures. Our creativities attempt both to invent, predict, and prevent what may happen, while time unfolds and hurls us forward, and we strive to swim as a species, rather than be pulled along by the current.

George Zebrowski and Gregory Benford have edited an anthology of space station stories, *Skylife*, to appear in spring 2000. Comments appreciated at [gbenford@uci.edu](mailto:gbenford@uci.edu)



*That book in this month's recommendations, *Pioneers of Wonder*, is a nice reminder of the days when most sf writers were well under the age of thirty. Here now is a story from a college undergraduate—Yoon Ha Lee reports that she just survived this semester's finals at Cornell. (It's curious too to note that she's our second contributor this month from Ithaca, New York.) Her first story for us was "The Hundredth Question" in our Feb. 1999 issue and we're writing now to her professors to request that they give her more time to write lyrical space adventures like this one.*

# Echoes Down an Endless Hall

*By Yoon Ha Lee*

THEY TESTED ME AGAIN and again to ensure that the implant had properly salvaged the functions of damaged tissues. "An experimental procedure," a doctor said once, actually volunteering information. I had learned to hoard my questions. In return, they accepted it when I chose not to say if I felt any pain here, or here, or here; if I *remembered*. Perhaps they thought I no longer understood pain, or my past. They were right on one count.

Red Knight, they called me, like a chess piece. I tried to tell them that there was no red knight in chess, that it could never be played. They never answered.

Neither the doctors nor the technicians forbade me a mirror. I knew what I was to them: a ghost given shape in metal and flesh, given silver prostheses for mobility, salvaging the wreck of what had once been a man. And inside my skull, concealed from the mirror's eye, was the implant to coordinate the prostheses and replace irreparable brain functions.

At night, I lay still beneath the dimmed lights, though I rarely

required sleep. During the quiet hours that even the doctors granted me, the memories surfaced, elusive and fleeting: a warm hand on my shoulder, a woman's inquisitive eyes meeting mine over a game of chess, a friend's favorite song that stayed in my head. "Echoes Down an Endless Hall," it had been called, a trio by an obscure Terran composer; I recalled neither the friend's name nor the composer's. Spiraling notes over a harmonica's plaint, theme and variations unfolding like lace.

The song in my head always ended too soon. Somehow I expected it to go on and on forever: more echoes, more variations, until the original theme was scattered into oblivion.

The woman came and went, a ghost dressed in black and gold and always standing aloof. She seemed another dream, given warmth and breath by the drugs that hazed my human senses or the diagnostics that shut down segments of my implant. Cryptic memories suggested I should know her: black swan to my red knight. The implant disagreed.

One day I woke in new quarters, woke though I had not slept, and did not question the vanished time. The woman was here, too, her fingertips resting on a chessgrid beside the bed. Only then did I realize she was not, after all, a ghost born of drug and dream. She nodded to me, apparently undisturbed by my lack of recognition, and gestured at the chessgrid. "For you."

I slid my silver-edged fingers over the chessgrid's control panels and brought the pieces into holographic life. After a while I looked away from the black and white pieces to the woman. "Who are you?"

She expelled her breath. "I am Serhana Diestes. I came to see if you were all right. How would you like to be known?" Like everyone else, she had trouble meeting my eyes when she spoke to me, but she did try.

I shrugged, and knew from her expression that I had carried out the gesture too mechanically. "I have been called Red Knight." If I had once owned a name, it was no longer relevant.

Her mouth lifted a fraction, inexplicably. "Ah." She smiled and searched my face, then nodded, tapping the chessgrid. "Something to pass the time, if the hours grow tedious. You were fond of chess, I believe?"

I saw no point in affirming something she knew and bent over the



controls, invoking the grid's processor and its network links as an opponent. After a moment I heard her retreating footsteps.

All my ghosts were nameless, though I hoped for a name each time one haunted me. Alas, the woman sitting across from me was no exception. She smiled, and I wondered how she would regard me if she were real. Swan-shaped earrings swayed when she cocked her head. The ghost's earrings woke muscles, or what passed for muscles: I was smiling.

The chessgrid: Once upon a death, over several slow weeks, I had reprogrammed another chessgrid and edited the source files on the ship's computer to expand the modes of play. Pawns became scoutships, knights became destroyers armed with cannon, bishops became fleet but flimsy starhikers. And so on. Red and black, blue and black, white and black, gold and black, the blazing colors of stars in the hungry night.

We had played each other many times, this woman and I. The first time we tried the expanded mode, she said to me, *I like this variant, but it bothers me.*

Why? I asked, awaiting her move.

Her earrings swung briefly out of sight as she glanced at the modified grid. You might not want to now, but are you sure you can put the game back the way it was?

*Backups. Reset the interface. Get another grid, I suppose.*

A sudden grin: *Could you build one from scratch if you had to?*

Whether or not I had taken her up on that gambit, I had forgotten. But, thinking of her gray eyes and her smile, I contemplated reprogramming this chessgrid, too. At least, trying to create an opponent for myself by drawing on links to computers more powerful than the local processor. Even now I found something darkly satisfying about chess, a bloodless war.

After a time security came for me, six men and women in dark uniforms. One swallowed when he met my eyes, though they were still human enough, and avoided my gaze thereafter. I followed unprotestingly through the corridors, whose harsh lighting and sterile air only emphasized their emptiness. My feet fell into the rhythm of the guards' steps.

A door swished open before us and a guard motioned for me to enter,

so I did. Inside, a tactical grid's radiance washed the walls with color, the lights overhead were pale and pitiless. Beside the grid sat Serhana Diestes. A weary smile crossed her face as she looked up at me.

I took the other chair, across from her. "I assume I was brought here for a reason."

"Of course." She swiveled in the chair to face me. "The doctors assure me that you've recovered. Is that right?"

"They would know."

"Medical opinions aren't everything. I was hoping you were feeling well enough to resume command."

*Command:* Ships arrayed in shifting patterns. Lasers searing across vacuum. Instrument readings molting from green to yellow, yellow to red, red to nothing at all. The cacophony of voices, the silent explosions hammering against tear-blurred eyes.

*Command:* Rotating displays lit by clusters of pinprick color. Twice-condensed reports from distant fleets. Pattern matched against pattern, both against chaos. Hours studying avenues of attack, plotting and re-plotting strategy.

"A war," I said slowly.

"You remember that much, then."

I caught the flicker of suppressed emotion at the edge of her voice and wondered what it meant. "Command of — ?"

She smoothed her sleeves, meticulously adjusting the golden buttons. "Command of Rapallion's navy." Serhana tapped one of the control panels. "War."

I refused to be diverted by the grid just yet. "I have rank?"

Serhana laughed. "Yes...Admiral Knight."

"Tell me what happened. I was injured in battle?"

"Yes."

"Unless I'm mistaken, admirals don't risk themselves on the front lines."

Serhana lifted her chin and gazed at me steadily. "They don't. But an attack came in the middle of an evacuation. You were almost killed."

I had no reason to disbelieve her. "Attacked by the Polity of Brechai." Doors were opening in the halls of my memory, one by one, though more waited behind them.

In answer, the woman flicked one of the tactical grid's controls. "The war goes poorly, Admiral." Another flick, and the panel before me blinked, passing access to me.

I brought up enlargements, inspected them, dismissed them. "The war is nearly lost, you mean."

Her hands tightened on the table's edge. "Are you well enough to resume command?"

"Who has been giving orders all this time?"

"Various admirals for various fronts, but what we need is a centralized command once more. The records are available through the networks."

"Very well." I studied her and her insignia more closely: one more door. "Premier Diestes," I added.

I STARTED GIVING orders though I had yet to meet any of the soldiers under my command. Names on rosters, service records, profiles that dissected psyches for the discerning eye — these would suffice, I was told. The only record that puzzled me was my own, a list of scattered accomplishments revealing little of the man I had been. The premier and her staff took my military skill for granted. I could afford no such confidence.

Loosing a ferret program to retrieve the lost, locked-away data — if it still existed — would not be difficult. Giving the ferret a safe den to return to with its find was another matter. I thought of the implant, knowing it sometimes drew on the networks' databases. But somewhere a bleary-eyed technician must be monitoring the implant's activity for medical or security reasons, more likely the latter. At several points I nearly gave up the endeavor, since it seemed an unnecessary use of time.

Finally, for several nights, I tampered circumspectly with the one processor that might be safe, that of the chessgrid. The ferret took shape, as lean and paranoid and keen-nosed as I could make it. All the while the implant believed I was amusing myself with the chessgrid, which was partly true. Then I freed the ferret and focused on the war.

No one had exploited the subtler patterns in the Brechai's blitzkrieg strategy while I was gone. I set about remedying this. I accessed data on

their culture and leaders: a splinter group of humans nearly as fierce in peacetime as in war, intent on conquest, with military technology comparable to Rapallion's. More reports alerted me to discontinuities between different styles of playing the game called War.

Other news came in daily, of citizens hounded from their homes, ships left in blackened ruins for the void to swallow, blood and fire. Piece by piece, move by move, I worked on the task they had set me. Save this colony; sacrifice that one. If I failed to drive back the Brechai, their advancing warfleets would corner us into submission. I balanced lives against lives, against a nation; soldiers' souls against civilians'; equations without simple solutions. The implant kept track of them all.

After time and painstakingly calculated defeats, I found ways to turn losses into gambits, retreats into counterattacks, casualties into exchanges that left Rapallion a piece ahead.

The rhythms of war returned to me readily enough. I went over the rosters, over ships' logs that the networks obligingly released to me. At first I discovered nothing new: *Enemy sighted. Engagement. Call for reinforcements. New objectives. Distress call received.* I almost lost myself in the litany of orders, similar to the ones I myself relayed to the commanders and captains, to the other admirals.

Gradually, I came to hear the words that lay unspoken, stillborn beneath the weight of military protocol. I learned how, after one captain perished, the battleship *Fist* skewed further and further into recklessness until she flung herself at a Brechai dreadnought, and won. And died. How mutiny erupted on the carrier *Straystorm* after the Brechai destroyed Empyrea, one home among many. How some squadrons fought harder and harder, blazing like blue stars as attrition tore them down, and others collapsed into ashes.

*Only a little longer*, I wished to tell the countless souls who had yet to fall in battle, or who had fled inward from the war's several fronts. Only a little longer while the Brechai reluctantly stepped back from the territory they had taken and paused to regroup, yielding Rapallion the older borders. Only a little longer until —

Until what?

I had arranged all my pieces, my soldiers, around the simple necessity

of defending Rapallion and her people. Limited resources with which to pursue a limited goal. But how many lives had I spent already?

Other questions exploded, unbidden, like neglected mines — slowly, slowly, at their own merciless tempo.

Was I to continue throwing soldiers at the Brechai until they had no hope of another invasion for the next ten years? Twenty? Hundred? Until they sued for peace? Or until Rapallion wiped them out entirely?

And there came a question like the final, ghostly chord of the trio in my head:

*When is this war going to end?*

The ferret was still searching, and I left it to continue its quest. I toyed with the chessgrid's controls, trying to summon more memories. Suddenly it seemed important to name my ghosts.

There had been a dark-haired woman with non-regulation, swan-shaped earrings: Odette. One name. Her brother Tam, who loved music, anything from *Swan Lake* — he had given the earrings to Odette — to aleatory concertos. Chys Keivan, who never smiled, whom I had once seen crying. Other ghosts, standing aloof in the corridors of my memory...of a dead man's memory.

*Don't you ever tire of chess?* sallow-faced Chys had asked, peering over my shoulder.

*Try poker,* said Tam, flipping an old-fashioned chip in the air. He and his friends were playing with an old-fashioned deck, too.

I raised an eyebrow. *I don't trust your cards.*

*You'd win anyway,* said Odette, and tossed back her hair.

Another ghost:

While passing me in the mess hall, an officer had grabbed my arm. *I heard you turned down another one.*

I shook my arm free, then stopped when I saw his face. *If only we could harness gossip for intelligence, we'd have an invincible fleet.*

*You're changing the subject.*

*So I am. You're out of line, soldier.*

The officer swallowed, saluted, and moved on. Only then did I regret my words.

Even now, ignorant of the incident's cause, I found I regretted those words.

More ghosts:

*But the ambush —*

*Won't be there, I had snapped, forcing the woman to look at me. If your ship leaves cover a second too soon, I won't need to fry you. The Brechai will do it for me. Understood?*

Odette said without interrupting her system checks, *How do you know that they haven't another reserve, sir?* No teasing, no camaraderie in her voice. No time for laughter.

I reflected. *Good point. Because —* and I had the computer dump several scenarios to her station. *They won't take the optimal deployment since it's too obvious, we're prepared for it, and it depends overmuch on individual initiative.*

A final ghost, nearer to me than the rest:

The airlock had been only an arm's length away, and I stared at it until my vision blurred. Stars waited outside, and icy vacuum, and the drifting remains of soldiers who had trusted me. I had, in my turn, trusted the orders given to me: a mistake. I should have looked out better for my men.

The metal barrier shone blade-like, granting me my reflection. *Wait for me,* I said to the stars, and moved away. Someday my turn would arrive.

Here in the present, alone with the chessgrid, I listened to the guards pacing outside my quarters. I had been a squadron commander; that much was clear. I had not given orders to strangers in faraway ships, but fought the Brechai directly.

Serhana Diestes had spoken of an evacuation, an unexpected attack. I was beginning to doubt her. Some things came to me more slowly than they had, despite the computer in my head. Or perhaps because of it.

I had learned to bow to the premier, and so I did when she entered. She, in turn, smiled and offered her hand to me. I declined the hand, looking away from the tactical grid and its drifting patterns. "A point of information, madam."

Serhana's eyes were watchful. "Yes, Admiral?"

"Rapallion is out of imminent danger," I said, thanking the doctors and technicians that my voice carried few inflections. "I thought it wise to reexamine the war's objectives on our end, for the sake of planning strategy."

She nodded briskly — too briskly, after a delay. "That's understandable. If I may — ?"

I watched while she gave the grid her own access codes. The display blanked out, then spun a map of bold colors against black, uncluttered by deployments and deaths. Gold for Rapallion and blue for Brechai, subtler shades of yellow and cyan for past gains or losses. "And?" I asked.

"We must be certain we'll never be overrun again," Serhana said. Her stiffness dropped away as fever swept through her words and she forgot who I was, what I was. "Vigilance isn't enough. Once this war ends, we have to make sure the Brechai won't attack us again. Secure our interests and cut away their resources. What weakens them can only strengthen us."

*Unless it weakens us too*, I did not say. "The borders can be secured further. Are you suggesting a counterstrike at their heart?"

Her laugh came high and strained. "I'm no military mind, Admiral. Yes. Yes. Do what it takes."

Unease blossomed within the parts of me that still understood unease. The premier's career was a matter of public record: Daughter of a border settlement that was ceded to the Brechai after a "diplomatic incident," at a time when Rapallion bitterly acknowledged that war would ruin her. Later, Serhana Diestes surfaced in politics, appealing to those who wearied of appeasing the Brechai, of *peace at any price*, and now she sat before me.

I imagined the girl she had been, buried beneath the years. Quietly, I said, "What of diplomacy?"

"Diplomacy lost us key industrial sectors," she snapped. "Diplomacy taught Brechai that Rapallion would cower and let a foreign power trample her. If we hold back now, Brechai will only try again later, generations down the road." She fidgeted with her sleeves; the gold trim and buttons glittered sullenly. "In any case, you needn't concern yourself with foreign policy. There's a war to be won."

*But it already has been*, I wished to say. Too late: she had already stalked out. Her footfalls joined those of the guards, then faded away.

A routine checkup, they called it when the doctors and technicians came to my quarters that night. I had cause to protest, but said nothing:

better to play along. I couldn't dismiss the possibility, though, that some subtler function of the implant was influencing my reasoning.

I let them drug me and dim my senses while they discussed operational parameters, and woke hours later by the count of the clock inside me. What they had taken from me, I had no way to determine. There were blurred spaces in my memory, but then, there had always been blurred spaces.

"Take it easy for a day or two," a technician said to me in a low voice before leaving.

I studied the chessgrid. *If only all wars were bloodless*, the thought came unbidden. But I was and had been a soldier, and soldiers learned to kill. To protect. I had a responsibility to Rapallion's fleet, Rapallion's people.

I wanted to laugh, couldn't. I had sacrificed so many to defend the nation, and the implant listed them all more quickly than a human breath, emblazoning them on my conscience. Why sacrifice yet more? There had to be a better way.

I closed my eyes. What had Serhana told me an eternity ago?

*Unless I'm mistaken, admirals don't risk themselves on the front lines*, I had said.

*They don't. But an attack came in the middle of an evacuation. You were almost killed.*

She hadn't lied, but played on unspoken assumptions: an elegantly constructed deceit. There had been an evacuation, and I had nearly died....

Evening, we had called it, though it followed neither station's time nor ship's time. Chys Keivan, dour as ever, remarked that each one must correspond to a timelocked evening somewhere in Rapallion. Poor Chys, who always looked as if he would rather sit in a corner scribbling equations instead of exchanging obscene jokes or playing games — yet he never failed to come.

Evening. When we all gathered like a motley family around our ships, technically to recheck maintenance, but we always got that part over with more quickly than we let on to the bureaucrats. We weren't the only squadron, either.

*I hear this sector's going critical in a matter of days*, said Ivan Margraise. He was busy stroking Tam's hair — no use getting either of



those two to stand watch in case some martinet stopped by — but everyone knew the remark had been addressed to me.

*Scuttlebutt gets to you before it tags me, Ivan,* I replied. *I don't know any more of this than you do.*

No, no, *the trick to hacking into* — Evhana, prompted either by the sudden hush or by Chys's glower, blushed and shut up.

I drew a deep breath, propping my elbow against my ship's strut. *Whole damn war's going critical, unless the government's holding a secret weapon* — someone snorted — *in reserve. Now leave me alone, okay?*

An earring's glitter caught my eye. *You're being unfair,* said Odette Viantin. *We're worried. Aren't you?*

*Well —*

Her brother Tam stopped humming Tchaikovsky long enough to crow, *He's human after all!* And winced when Ivan elbowed him.

Scuttlebutt had been too optimistic, for once: the sector had already gone critical. If I had known more I would have been able to warn those around me, but it was too late. Matters had already been decided at the upper echelons. Alarms tore into our old routines; spindles of fire splintered our lives. Under my leadership, a covey of squadrons covered the retreat, and yet the Brechai swarmed forth. In the strident accelerando of combat, I had found but a single way to minimize losses.

Memories, memories, memories, returning despite the whisper in my head that insisted I had more pressing concerns. Hands that had cradled a woman's fingers, sweated, tightened in pain or fury or desire. Eyes too empty for tears. Ignoring orders to turn tail so more people could pay for my survival with their own charred bones.

Though I had rejected post after post, promotion after promotion, I had never escaped the government's narrow surveillance. I was one of the few who retained a lower rank rather than letting their promises of glory and power seduce me. Even after they saw me send my friends to die that others might live, even after they saw that a tactical genius can lose, they wanted me.

Chys Keivan, one of the few survivors of the First Massacre, where the Brechai struck without warning. Ivan Margraise, who loved wit and poetry. Odette and Tam Viantin, sister and brother. Evhana Marchiond,

once a programmer. And all the others I had disciplined, smiled at in passing, beaten at chess.

Serhana hadn't lied. Admirals don't risk themselves on the front lines, and I had not been an admiral during the evacuation, only after.

*An experimental procedure*, the doctor had told me. How many times had they run this experiment?



ONCE BEFORE had I attempted this exercise, on a smaller scale: I had played to lose, and lost to Odette. This time I had no margin for error. A game for three, against Rapallion and Brechai. A trio.

Pain and revenge were hard masters to give up, it seemed. I knew no other reason that either nation would continue war past the obvious objectives of territorial expansion or self-defense and into the cinders of ruin. I wished I could tell them otherwise, but the only voice I had was the voice of war, and their voices in reply told me they were unready to listen.

Discontinuities shifted as the Brechai, hampered by using a patchwork of officers in lieu of a centralized command in the vastness of space, strove to make sense of my strategy. I parried their probing attacks, seeking to discourage, not cripple. A way of warning them, *I can destroy you*, if any of the Brechai strategists appreciated the deeper nuances of war. A way of asking those involved to find another way to resolve the conflict.

More dangerous was the premier, whose voice grew more cold and cutting each time we met. Sometimes, when the human part of me grew tired, I mistook her presence at my shoulder for one of my ghosts. Then I recognized her black-and-gold garb or her piercing eyes, and the ghosts fled.

There would come a point when Rapallion, now the aggressor, could choose to destroy lives for the sake of conquest or surrender that dream for the sake of her citizens. I had engineered the war in this direction and its consequences shifted accordingly. Yet I thought of Odette and Tam, Ivan and Chys and Evhana, the millions of soldiers like them — if they had lived and were serving in some squadron among the many I commanded now, however distantly, would I give the same orders?

*Who are you betraying?* I asked myself as the war's trajectory veered toward a draw. Whether I was right or not remained to be seen.

\*\*\*

The ferret had scurried to its home after scouring the computers, and now waited for me to inspect its catch. I erased the program and tinkered with the chessgrid until it displayed the patchwork data. As I scanned the display, the implant automatically began extrapolating for missing text and skewed images. I wondered if another "routine" checkup had just been scheduled.

Still I lingered, like an orchestra spellbound by a fermata, on the chessgrid's staticky visuals. Here he was, dark-haired and hazel-eyed: Christophe Deianda, the man I had once been. The record included the standard voice clip, in which he recited his name, rank, and so on, but the chessgrid had no playback capability. I pulled out the audio data, reconstructed it, and heard in my head a sharp, almost sarcastic voice. The psychological profile revealed latent emotional instability, an unusual capacity for creating synergy, loyalty — to his soldiers and not the government, I knew.

What would Chys have said if he met me now? Would Ivan and Tam have turned away at my approach? Would Odette have flinched from my metal touch on her warm skin?

What had I become?

Flesh bleeds. Metal cannot.

Red Knight, red blood, red rust.

*Killed in action*, claimed the record.

*Rest in peace*, I wished Christophe before I deleted the stolen data. For his sake — for all the soldiers' sakes — I would keep trying to wrest control of the war from Rapallion and Brechai, and bring this trio to a close.

"You're stalling."

Without moving away from the tactical grid, I said, "Beg pardon, madam?"

"I'm not a fool, Admiral." Serhana exhaled slowly. "It's a miracle you've wrought. Why throw it away?"

I listened to her footfalls, the sweep of her long hair, the whisper of black and gold clothing. It dismayed me that I could call these to mind more clearly than Chys's flickering scowl or Evhana's sly, trilling laugh; Ivan's deceptively mild eyes and Tam's absentminded humming; Odette's

shy touch and Christophe's sharp, impassioned voice. "I asked you earlier about diplomacy, madam. Surely the Brechai are willing to negotiate by now."

The premier stood in front of me now, and I saw the dark smudges beneath her eyes. "You think they can be trusted."

I let my hands lie still. "That's an evasion, madam. Trusted? I wouldn't know. But they are reaching a point where they have few options, and their leaders are not ones, I hope, to glory in mass suicide."

She stiffened. "Is it impossible to subdue the Brechai for once and for all?"

"No," I answered, "but at this point the losses would be unspeakable. You will have made life...safer...for future generations of Rapal, but those generations will be few and scattered. Look — " I manipulated the controls, changing the grid's display to a mosaic of livid red against black. "Casualties, madam. Ours and theirs."

I thought I heard her mutter — scarcely a mutter, at that — "Not again." Then she said, "It is war. I know the numbers."

Do you? I wondered, reviewing the figures.

"It is a soldier's duty to fight for his land. Better that than surrender."

"A soldier's duty, perhaps," I murmured, "but what of those who send soldiers to die?" More than ever, I became aware of the guards pacing the corridor outside, and plotted their paths in my head. "Have you ever been a soldier, madam?"

She had no answer.

"I ask you again: is there no other way?" I had left the premier a way out, not only for herself, but for Rapallion, since the Brechai were no longer a threat.

She sucked in her breath. "Necessity — "

I looked up at her resolute, sleepless face. "Necessity," I repeated in a voice that was calm because it could not be otherwise. "War isn't chess. You sacrifice lives, not pieces."

Her eyes upon mine were cold and certain. "If you allow us to be defeated, more lives will be lost. You're the one playing games, Admiral, and you know it."

"There is little possibility of defeat at this point." I met her gaze. "I remember, now, why I became a squadron commander — and stayed one."

I wasn't risking anonymous units; I was risking myself and my friends." The word almost caught in my throat. "Every time I gave an order in battle I had to remember that a miscalculation on my part might result in their deaths.

"They threatened to promote me again and again, put more soldiers under my control. I threatened to desert, turn traitor, kill myself — anything to make them leave me alone. They had enough power-hungry officers. They never understood that the last thing I wanted was to become another one 'playing games.'"

Christophe Deianda's mouth would have twisted. I could only press my fists together. "I almost lost contact with the people I was ordering around. Damned if I'll let it happen again. Let me go to the front lines and parley with the Brechai. There must be a better way to settle this. I may not be completely human" — the premier flinched — "but I can at least try to treat soldiers as human...the Brechai as human."

Serhana crossed her arms. "Do you think it's that simple?" She touched one of the gold buttons on her black sleeve. The door hissed open. "In the long run, you would destroy Rapallion."

"Destroying it is simple," I said. "Preserving a nation is another matter entirely."

The guards had entered and surrounded me, six men and women in dark uniforms, with uniformly dark expressions. *We are following orders*, the six uneasy faces told me. *Do not resist*.

*I already have*, I thought, wondering if I had done enough — dared enough. Serhana had turned her back to me. I bowed my head and stood, allowing the guards to escort me from the room: mate in two moves. I knew when to resign.

In the darkness I remembered a soldier who had defied his orders and headed back into the inferno to which he had fed his friends' lives. In the darkness I remembered an admiral who had sought again and again to salvage a war he had sabotaged again and again. In the darkness I sought to save my memories, even knowing I would fail, or worse, that I would soon cease to care....

It had promised to be a thankfully uneventful evening portside: time to relax, whatever form that relaxation might take, or time to think.

I was playing solitaire chess when a hand waved in front of my eyes. *Go away, Ivan*, I said without looking up.

*If you're a solipsist you can pretend I don't exist*, he said helpfully. *I'm not.*

*Then you have a problem, don't you?*

I sighed, grasped his hand, and moved it out of the way — and caught sight of the newcomer hovering behind him, looking wistfully at my chessgrid. I recognized her bird earrings. *You're the one I warned about the jewelry*, I said to her.

*I'm off-duty, too*, she replied, grinning. *Or shall I say, I'm off-duty, sir?* She tapped the table. *Tam told me you were looking for a chess partner. Want to give it a try?*

*Odette!* Tam had come up beside her and was shaking his head. *Pardon my sister.*

*Your sister?* I repeated brilliantly.

She laughed and patted Tam's shoulder. *To his everlasting regret.*

*Start over*, Ivan advised me. He glanced at the woman and added, *Don't mind Sir here. He's always in a foul mood when he's thinking of ways to trample tyrants, outwit evil overlords, and save Civilization As We Know It.*

She laughed again. *I'm Odette Viantin. As you know by now...sir.* Her hand stole toward the chessgrid, then drew back.

I nodded to her and she reinitialized the game. *You're right — we're off-duty and I shan't quibble about regs*, I said by way of apology. *You have a lovely name. — White or black?*

From the corner one of the poker enthusiasts said, *What, Deianda's falling for the dame?*

Odette grinned at me.

I raised my eyebrows at her, which prompted a round of jokes and innuendo that I affected not to hear. Across the room, I saw that Evhana's ears were burning even as she contributed, and I chuckled.

*I'll take white, if you please*, said Odette, touching one of her earrings. *And it's not much of a name, really.* She opened with a Guinevere gambit.

*It's from a ballet*, Tam told me. *The white swan princess. Cheer up, sis, it could've been Odile.* He misinterpreted my blank expression — what was ballet? — and said, *The black swan.*

I gave Odette the standard response and waited.

*The white swan dies at the end*, she said to her brother while squinting at the pieces. *The story doesn't say what happens to the others, but the black swan survives, and the white swan doesn't*. She gave me a rueful smile. Sorry. *Tam and I have had this argument on and off through the years*. She opened an arc of attack for one of her bishops.

*Maybe this time the white swan will live instead*, I said, resolving to look up the story someday.

*Maybe*. Her earrings danced. *Your move?*

We played on while Tam rambled about the history of *Swan Lake* productions. Odette and I, it turned out, were so closely matched that it hurt when I ended the duel by making the proverbial second-to-last mistake.

I lost that game but gained a friend: an exchange well-made.

...And out of the darkness it ceased to matter, as did the hours at the tactical grid hounding the Brechai into destruction, the crescendo of casualty lists, the whispers of *Red Knight*. I had owned another name, once, but the memories were faint and far away, stretched like gauze over the gaps in my past, like echoes down an endless hall.

The black swan survives.

A tactical genius can lose.

—for Paradox



*Bradley Denton is the author of such novels as Blackburn, Lunatics, and Buddy Holly Is Alive and Well on Ganymede, and he is reticent enough about any new projects to arouse suspicions. His short fiction was indeed collected into a book with a title that sounds like lyrics to a Pink Floyd song. Mr. Denton lives on the outskirts of Austin, Texas, and reports that while it may resemble our consensus reality, this story is most definitely not true. Should you doubt this statement, contact the Travis County (Texas) Sheriff's Office regarding Case Number 98-9810957.*

*Or write to the Australian Army and inquire about the year 1932...*

# Bloody Bunnies

*By Bradley Denton*

**T**HE DAY I DIED WAS Thursday, December 10, 1998. It was overcast, drizzling, and cool here in Central Texas. Brodie

Lane, an asphalt road between my rural home and the city of Austin, was shiny and slick.

A spot in the center of my chest and another on my lower right ribcage didn't feel right. The spot in my chest worried me, because I remembered reading about the wreck that had killed the comedian Sam Kinison. Kinison had walked away from his car, then sat down and died on the side of the road because his aorta had torn apart when his chest hit the steering column.

I didn't know whether my chest had hit my pickup's steering column. I was still wearing my shoulder belt, so maybe I was just bruised where the belt had caught me.

If I had blacked out, it hadn't lasted long. I could hear steam hissing from the radiator. The windshield had cracked, but I couldn't see much else because the hood had crumpled and popped up in front of it. I wanted to get out of there.



But first I had to get the zippered black nylon bag from behind the seat. I had to keep that with me, although I couldn't remember why.

So I managed to unhook my seat belt, twist around, and grab the bag's loop handles. A stab of pain shot through my ribs, but I held on to the bag. It was smaller than a briefcase and didn't seem to have much in it.

Then I realized that my glasses had flown off my face during the wreck, so I had to turn back around and paw at the floor with my free hand until I found them among the scattered pennies and Altoids. They were twisted, but the lenses were still in place. I bent them back enough so they stayed on my nose, and then I tried to open my door.

It was jammed shut, so I hauled myself across the bench seat and found that I could get the passenger door open about a foot and a half. That was far enough for me to squeeze through, wincing at my chest and ribs, clutching the black nylon bag.

Once outside in the drizzle, I smelled gasoline and coolant. My blue Dodge Dakota pickup truck was on the wrong side of a curve, its camper-shelled bed blocking part of the lane and its crumpled front end resting just off the edge of the pavement.

On the other side of the road, broadside across the northbound lane, was the silver Nissan pickup that had come around the curve too fast. I had been driving north on my way to buy Christmas presents in Austin, and this guy had come around the curve heading south. He'd started fishtailing off the road, had overcorrected, and then slid across into my lane. I had tried to get around him, but his rear axle had swung into my grille like a battering ram. I had been going about 40 mph, and he had been sliding toward me faster than that.

As I stood there with my nylon bag in hand and my glasses askew, wondering whether my aorta was emptying into my chest, I looked over at the Nissan and saw that its cargo bed had caved in where it had hit my Dodge. But its cab hadn't been touched, and the driver stood beside it looking sheepish. He was a young guy in a letter jacket. He tried to smile at me, but he knew he had screwed up.

"Are you okay?" he asked.

I could hear the mingled hope and fear in his voice, but all I could do was tell him the truth.

"I don't know," I said.

Then I turned away and stumbled northward along the left edge of the road, staring west past the ditch and the barbed-wire fence at the scrubby field beyond. I saw something big and brown moving behind a clump of twisted cedar, so I clutched the nylon bag tighter and walked faster. Then the brown thing vanished. But I kept walking.

I didn't know where I was going, just as I didn't know why it had been important for me to take the nylon bag from the truck. My chest and ribs hurt with every step, but I was afraid of what might happen if I stopped. As long as I was in motion, I told myself, I was still alive.

A telephone-repair van approached from the north, slowed, and pulled over in front of me. So I had to stop after all. I asked the van's driver to call the sheriff, and then I looked back south through drizzle-specked lenses. My Dodge's rear hazard lights were flashing, but I didn't remember turning them on. I did remember, however, that I would need my driver's license and insurance card when the law arrived. So I went back and rooted around on the floor of the cab again until I found my wallet. Then I paced back and forth in front of the truck's crushed front end and watched green coolant trickle away through the gravel under the radiator.

A good ol' boy in a crew-cab Ford drove up and offered to use his truck to push my wreck far enough off the road for traffic to pass. I took him up on it and tried to put the Dodge in neutral, but the transmission had locked up. The good ol' boy did it anyway, though. I had to shout to stop him from pushing me all the way into the ditch, which was deep on that side of the road.

A few minutes later a Travis County sheriff's deputy showed up, along with two tow trucks. The deputy asked me if I wanted an ambulance, but I didn't. I had decided by then that my aorta was still intact. My ribs hurt worse than my chest.

Then the telephone-van driver let me use his mobile phone to call my wife, Barb, at home. I told her I was only three miles from our house, and she said she'd be right there.

The tow trucks hauled my Dodge and the other guy's Nissan to a nearby church parking lot, where the deputy took our statements and determined that the other guy was at fault. Barb showed up in her Saturn before the deputy had finished his paperwork — she had been heading for the curve, but spotted us in the church lot — so I got into the car with her to wait. I was glad to see her.

She pointed at the black nylon bag on my lap.

"What's that?" she asked.

I had been hoping she would know, because I still couldn't remember. But I didn't want to open the bag to find out just yet, because it might contain a Christmas present that I'd hidden in the Dodge so Barb wouldn't see it.

"A secret," I said.

The deputy came over then, returned my license and insurance card, and told me where my wrecked truck would be towed. He also suggested I see a doctor, just to be on the safe side.

I thanked him, and then Barb drove us home. On the way, I put my insurance card back into my wallet and started to do the same with my license. But its photo made me stop. The photo was of me, all right — same dark-straw hair and beard, same farmboy face — but I wasn't wearing my glasses.

"This is weird," I said. "I only take off my glasses to sleep."

Barb glanced at me. "They made you take them off for the picture when you went for your renewal. You thought it was weird then too."

Now I was afraid that I had hit my head in the wreck and lost part of my memory. My head didn't hurt...but I couldn't remember what was in the nylon bag, or taking off my glasses for the driver's license photo.

I started probing my scalp with my fingers as Barb pulled the Saturn into our garage, but I couldn't find any bumps or sore spots.

"What's wrong?" Barb asked.

I stopped probing my scalp, and then I replaced the unfamiliar license in my wallet. "Nothing," I said. "Just checking for contusions."

"We're calling for that doctor's appointment now," Barb said.

So we went into the house, made the call, and arranged an appointment for the next morning. Then I went back to the small bedroom that serves as my office, ostensibly to hide the Christmas surprise that was inside the nylon bag. My fourteen-year-old black lab/Irish setter dog, Watson, was asleep on the office floor and didn't wake up when I came in. I closed the door and sat down at my desk, then cleared away a stack of papers and books to make room for the bag.

I sat there staring at it for a while. What if I opened it, discovered what was inside, and still didn't remember why it was important? What if a chunk of my memory really had disappeared? What if I couldn't remember

the names of my friends or family? What if I had forgotten how to touch-type or when to flush?

I told myself I was being ridiculous, didn't believe it, and unzipped the bag anyway.

Then I looked inside, let out my breath, and grinned. Of course I knew what it was, and why I had taken it from the truck even before retrieving my wallet.

I also knew why Barb hadn't recognized the bag. She had agreed that we needed to protect our pets and home, but she didn't approve of carrying weapons in our vehicles. So I hadn't told her when I'd stashed one in the Dodge and another in the Saturn.

I took the weapon from the bag to make sure it hadn't been damaged in the accident. The thin metallic barrel still flared into a neat parabola at one end and tapered into a black plastic handgrip at the other with no dents or dings in between. The three-position switch above the trigger still clicked from E to O to C and back again, and the arming switch in the handgrip still worked too. The red LED above the trigger came on, and the green LED beside it began glowing a few seconds later when the unit was charged.

My emu pistol was still in good shape, and that might mean that my memory was too. I felt much better.

**I**T DIDN'T LAST long. For one thing, my ribs gave me a pang as I set down the emu pistol and stood up from the desk. And then, as I went into the hallway, our gray cat Rufus came sauntering out from the master bedroom and rubbed against my ankle.

That might not sound like a problem, but it was. Rufus had been dead for two years.

Barb came running as I yelled, and Rufus looked up at me as if he thought I was brain damaged. And I was fairly certain I was. Rufus sure didn't *look* dead anymore.

"What what what what what?" Barb asked.

I pointed at Rufus. "He's alive," I said.

Barb looked at Rufus, then at me, then at Rufus. "When wasn't he?"

"Two years ago," I said. "Two years ago, when he was ten, when he went outside and —"

I stopped myself. Somebody here was a few bubbles off true, and the circumstantial evidence was pointing toward me. So I didn't say what I knew had happened two years ago: Rufus had died when a lone emu had pushed open the gate in our chain-link fence, come into the back yard, and killed him.

"When what?" Barb asked.

I shook my head. "Nothing. I'm just rattled from the wreck."

Barb squeezed my shoulder. "I don't blame you. But Rufus is fine, and Watson and Clarence are fine too."

"Does Watson still have arthritis?" I asked, looking back into my office at the sleeping dog.

"Uh, yes," Barb said. "And Rufus is still diabetic, and Clarence is still afraid of everything. He probably ran and hid when you yelled."

So Rufus was alive, but diabetic. It was news to me. I squatted and petted him, thinking that I might discover he was a different cat from the Rufus I remembered. But he had the same scruffy gray fur, the same bad fish-breath, and the same attitude of fearless entitlement.

That was what had gotten him killed in the first place. Our other cat, Clarence, had been in our half-acre back yard that evening too, but he had run for the house in a black-and-white blur when the emu had arrived. Rufus, however, had stood his ground. He had probably thought that the five-to-six-foot-tall bird was a giant chicken that the God of Cats had sent him for supper.

I had looked out the window when Clarence burst in through the pet door, caught a glimpse of the emu in the waning light, and had then grabbed the home-protection emu pistol from the hall closet and run outside. But I had been too late. The bird had gutted Rufus with its talons, stomped on him, and vanished back through the open gate — the gate I had stupidly forgotten to latch that afternoon — before I could get close enough to scramble its tiny, murderous brain.

Now, though, the cat that I had buried by the live oak tree at the end of the yard was purring as I petted him and batting at my hand when I tried to stop. But I had to stop anyway, because squatting wasn't doing my ribs any good. I thought about going down to the tree to see whether the grave was still there, but decided that was a bad idea.

"How about lunch?" Barb asked.

"Sure," I said. "I'll make it."

I wasn't hungry. But I didn't want to try to write, and making lunch was a good way to avoid it. I burned three grilled-cheese sandwiches before giving up and starting a salad.

Then, while looking for croutons, I came across a bag of syringes.

"Honey!" I yelled. "Are you on junk?"

"Excuse me?" Barb called from the living room.

Then I saw that the label on the bag said, "For Rufus (cat) — 4 units/Once daily."

Of course. If Rufus was diabetic, he needed insulin.

"I mean, have you given Rufus his shot today?" I yelled.

"No. You said you'd do it as usual when you got back from Christmas shopping."

So giving Rufus his insulin was my job, but I had no memory of ever doing it. Still, how hard could it be?

I found a vial of insulin in the refrigerator, figured out how to fill the syringe to four units, and then grabbed Rufus and discovered how hard it could be. But I managed. And I would do the same thing, I told myself, with any other mental gaps that presented themselves. I would spackle the holes in my memory one by one until they were invisible again.

After lunch, I took the garbage to the compost heap and found that being outside made me paranoid. Even though no emus had come near our yard since the one that had killed Rufus (an event which apparently hadn't happened in the first place), I was convinced that I could hear a whole flock of them pushing through the trees and brush behind our fence.

So after dumping the garbage, I went back to the house and closed the pet door after checking to see that Watson and the cats were inside. Then I went to the hall closet. My plan was to arm myself, then go out behind the fence and either brain-scramble or scare off the birds that I knew were back there.

But the emu pistol that we kept in the closet was gone, and so was its holster. Even the hook that the holster had hung from was missing.

My paranoia worsened. With the sore spot in my chest aching and my ribs feeling as if they were wrapped around a steak knife, I went into the garage and reached under the Saturn's passenger seat. All I found were a wadded Kleenex and an empty Butterfinger wrapper.

I rushed back into the house and almost shouted to Barb that two of our emu pistols were missing, but stopped myself. She was reading a book, and there was no point in alarming her — especially since she hadn't even known about the pistol I'd hidden in the Saturn.

Barb had never believed that the emu threat in our area was serious, since most of the flock sightings and the worst of the attacks had taken place far out in the Hill Country. And since I had caught only an uncertain glimpse of the emu that had killed Rufus, she had always suspected a bobcat or raccoon.

But I had known better, so I had bought two extra pistols beyond the one provided by the state so we'd have protection away from home. We lived close to Austin, but not so close that lone emus or ostriches separated from their Hill Country flocks couldn't cause trouble for someone changing a flat tire.

Now two of our three pistols were gone. But since I remembered buying the extras because of Rufus's death, and now Rufus wasn't dead, maybe we'd never had more than one in the first place.

I went into my office and found that the pistol I'd taken from the Dodge was still on my desk, charged and ready to go because I'd left the arming switch on.

So I took it outside and tramped around behind our fence until I was satisfied there were no emus lurking about. Then I returned to the house and opened the pet door so Watson, Rufus, and Clarence could have access to the back yard again.

Clearly, both my paranoia and my memory problems had been caused by stress from the wreck. So my theory now was that Rufus's death had occurred in a hallucination I'd had during a blackout after the impact with the Nissan. The memory seemed much more real than that, but perhaps that was only an indication of how hard the two trucks had collided.

As I finished taking the plastic slide out of the pet door to open it, I heard Barb's voice behind me.

"What the heck is that thing?" she asked.

I turned and saw that she was pointing at the emu pistol, which I had laid on the floor while opening the pet door.

I could tell from Barb's tone of voice that she wasn't kidding. She really didn't know what it was.

Great.

I could have told her the truth, but there was no point in that. If the truth could have made sense to her, she would have known it in the first place.

"It's a toy," I said. "I found it in the back yard. One of the neighbor kids must have thrown it over the fence."

"Oh," Barb said. Then she looked at me with concern. "You probably don't feel like working. Want to watch a video?"

"You bet. Pick one out, and I'll be right there."

Barb went to select a movie, and I switched off the emu pistol and put it back into its nylon bag in my office. Then I joined Barb in the living room, and we watched a Bill Murray film, *Groundhog Day*.

I tried to take comfort from the fact that I recognized the plot, but I didn't succeed. In the *Groundhog Day* that I remembered, Bill Murray had been bald. In this one he had hair, but it looked as if it had been applied with a glue gun.

That night I tried to stay awake because I was afraid to fall asleep. I was afraid that I was still in my truck at the moment of impact, and that instead of Rufus's death, it was my whole waking life since the wreck that had been a hallucination. If I fell asleep, the hallucination would be over. And so would my life.

But despite my best efforts and the pain in my side, I finally did sleep. I dreamed of trying to run away down Brodie Lane while being pursued by a thundering flock of ostriches — which, as most people know, can be even more dangerous than emus.

I woke up on Friday morning, so I was either still alive or still hallucinating during the split second before my death. But I didn't have time to try to figure out which, because Barb roused me from bed to drive me to the doctor's office in Austin. It was another gray, drizzly day, and I clenched the armrest all the way to town.

Barb went into the examination room with me. She wanted to stay close both to keep me calm and to find out whether I was seriously damaged.

I was curious about that myself, because I still didn't feel square to the world. My toothpaste had tasted odd that morning, like peppermint instead of cashews, and it had freaked me out a little.



The doctor asked a lot of questions, squeezed my ribs (which hurt), thumped my chest (which was feeling better), and then sent me down a hallway for an X-ray. Barb came along, and we waited outside the X-ray room until a technician appeared and called my name.

I went in, and Barb stayed outside as the technician closed the door.

Inside the small room was a white table, and suspended over it was a gigantic machine that could have been a prop in a 1935 Universal horror movie.

"What the heck is that thing?" I asked.

The technician gave me a quizzical look. "It's the X-ray machine."

I stared at it. "I've had X-rays before," I said, "and the machines weren't anything like this. This looks like something an evil genius would use to torture James Bond."

The technician chuckled. "Just take off your shirt and lie face down on the table."

"I'm not kidding," I said. "The last X-ray I had was about eight years ago, and the machine was the size of a Polaroid camera."

The technician raised an eyebrow. "I think that probably was a Polaroid camera. Take off your shirt and lie face down, please."

I did as I was told. It was painful to lie on my belly, and I gritted my teeth as the technician fiddled with knobs and switches on the contraption above me. Then he inserted a piece of film the size of a cookie sheet into a slot in the table.

"It wasn't a Polaroid," I said, wincing. "The radiologist had me stand against the wall, and then she picked up the unit and pushed a button. The film came rolling out from the bottom. I thought they were all like that."

"Okay," the technician said. "Don't move."

Then he took a heavy apron from a peg on the wall, put it on, and stepped behind a metal partition. He peered at me through a window that looked as if it belonged on a space capsule.

"Take a deep breath and hold it," he said.

I had a bad feeling about all of this. "Why are you standing way back there?" I asked.

"Because I do this thirty times a day," he said, as if speaking to a three-year-old. "The lead apron and the barrier protect me from too much radiation."

His explanation only made my bad feeling worse. "Hey, I'm lying here without even a shirt. What's protecting me?"

"Take a deep breath and hold it."

I was beginning to freak out a little more than I had from the peppermint toothpaste.

"Do you expect me to talk, Goldfinger?" I cried.

"No, Mr. Denton," the technician said. He sounded annoyed. "I expect you to take a deep breath and hold it."

I took a deep breath and held it, convinced that the next thing I felt would be a laser beam slicing through my spine. But there was only a click and a buzz, and then the technician came out from behind the partition. He pulled the sheet of film from the table and inserted another.

"One more," he said. Then he looked down at me with a smirk. "Think you can stand it?"

He sounded mighty condescending, I thought, for a guy wearing a lead apron.

Twenty minutes later, back in the examination room, the doctor told me and Barb that the X-ray had revealed three cracked ribs. She wrote a prescription for painkillers, then gave me a velcro-fastened elastic-ban-dage "rib belt" and told me to come back for more X-rays in three weeks.

I told her I'd think about it.

WE STOPPED at our usual supermarket on the way home, and I headed for the pharmacy window while Barb grabbed a cart and went to pick up a few other items. The rib belt was tight and uncomfortable, and I wanted to loosen it. But that would have involved unbuttoning my shirt and ripping open the velcro while on line behind an elderly lady who was there to pick up her blood-pressure medicine. It didn't seem like a wise move.

After getting my prescription, I met Barb at a checkout lane and helped her unload the cart. It was at this point that I once again began to freak out a little.

The kid manning the register took the first item, a can of soup, and waved it over an asterisk-shaped plate of glass set into the counter. Something made a beeping sound, and then the kid rolled the can down the

counter to another kid who looked at me and asked, "Paper or plastic?"

My rib belt seemed to constrict around me even tighter.

"Uh, neither," I said. "It's soup."

Both kids looked at me dully.

"Plastic will be fine," Barb said, giving me a don't-be-a-smartass look.

But I wasn't being a smartass. I was baffled. I could see now that the glass plate had a red light burning beneath it, and the beeping sound happened every time the cashier waved something over it. And the kid at the end of the counter was putting our groceries into flimsy plastic bags instead of sturdy foldout boxes. Everything except the canned goods would be mashed flat before we got home.

All of this oddness, plus my lingering unease over the giant X-ray machine, made me dizzy. I wanted to close my eyes, but I was afraid that if I did, I would reopen them to discover that I was lying on the wet asphalt of Brodie Lane with mist falling into my face and my brains dribbling into the ditch.

And maybe that was where I belonged, because I sure didn't seem to belong where I was.

So I went ahead and closed my eyes, but when I opened them I was still at the checkout counter with Barb, and she was paying for our groceries by passing a credit card through a slot. That, at least, was familiar. But that was how the groceries should have been tallied, too — by swiping price tags through a slot, not by waving things over a glass plate.

The only thing that made me hope I still might be mostly sane was that Barb seemed to be the same person she had been before the wreck. She was five-foot-two with curly brown hair, green-flecked eyes, and a lot of patience.

On the other hand, she didn't know what an emu pistol was, and the bizarre supermarket-checkout routine didn't faze her. I wished I'd dragged her into the X-ray room so I could have seen her reaction there.

I didn't say any of this to her, though. First, I decided, I would give my brain a chance to straighten itself out. The tow yard where my Dodge now sat was on our way home, and we were planning to stop there to retrieve a few things that I hadn't thought to take with me after the accident. Seeing the crumpled truck, I hoped, might jolt my head back into place.

But when I slogged through the muck in the tow yard toward the

Dodge, all I could think was that it was impossible for me to be alive. The front end of the truck was even more crushed than I had realized the day before. The hood had folded, the right front tire had exploded, the grille had disintegrated, the radiator had burst, and the frame had bent like al dente spaghetti. The right front fender looked like an aluminum can that had been run over by a lawn mower. The engine had compacted up against the fire wall, and the fire wall had bowed inward. The Dodge was totaled and then some.

As I stared at the destruction, Barb snapped some pictures of me and the truck with a disposable camera she'd bought at the supermarket. We had decided to photograph the damage in case there were insurance problems, but now I also thought I'd want the pictures just so I could see myself standing beside what should have been my coffin. Just so I'd have visual proof that I walked away from it.

And right on the heels of that thought, I recalled that a photograph wasn't proof of anything. You could alter a photograph to make it look as if Abraham Lincoln walked away from a wrecked Dodge.

Or was that only true in the world I remembered? Was it also true in a world where groceries were packed into plastic bags, X-ray machines were the size of bass boats, toothpaste tasted like peppermint, and Bill Murray had hair?

Barb drove us home from the tow yard via Brodie Lane, and once again I glimpsed something big and brown off among the cedars. So I leaned down to grab the emu pistol from under the seat, but remembered just as the pain cut through my ribs that there wasn't one there anymore.

And whatever I had glimpsed was gone when I looked again.

That night, after Barb fell asleep, I left our bed and went across the hall into my office. My ribs were hurting like mad despite my pain pills, but I wouldn't have been able to sleep anyway. Too much in the past day and a half had just been wrong.

I closed the door, turned on my computer, and booted up my Internet software. Then the modem dialed and logged on as it was supposed to, and I relaxed a little. I had been afraid that this new world might not have the same Web that I knew, but so far it looked familiar. Even my incoming e-mail list was loaded with the usual get-rich-quick junk and porn-site

solicitations. And I still didn't know how my name had gotten onto the porn-solicitation list. Honest.

After deleting the junk and reading the few pieces of real mail — all of them from names I recognized, thank goodness — I jumped to a search-engine site and typed in "dangerous," "Texas," and "emu."

Then, as I waited for the list of hits to pop up, I took my emu pistol from its bag and pointed it at the screen as if expecting one of the feathered monsters to leap out at me. I almost hoped one would, because at least then I'd know for sure that I was hallucinating. And I would have the right weapon at hand to dispatch the hallucination.

To my initial relief, there were some promising news-article hits. But when I jumped to the sites and began to read, a chill spread up from my sore ribs into my chest.

According to the online articles, a few out-of-business Texas emu and ostrich ranchers had simply released their birds rather than destroy or sell them. And these birds were indeed a potential problem to farmers, motorists, and others.

However, what I read made it clear that the emu and ostrich industry had never been an important one in the state, that the numbers of free-roaming birds were few, and that dangerous encounters were rare. The birds were big and skittish, but they weren't murderous.

This was not as it was in the world, in the Texas, that I remembered.

In that world, the Texas ratite industry enjoyed a boom in the late 1980s akin to the booms enjoyed by the Texas petroleum industry in times past. Emus became lucrative because of demand for their low-cholesterol meat and the skin-care products made from their body oils, and ostrich feathers and eggs followed suit. So emu and ostrich ranches sprang up throughout the state, with a heavy concentration in the Central Texas Hill Country.

Then, in 1991, the Texas beef industry fought back with a television ad. In the ad, a prissy Yankee orders a chopped-emu sandwich at the counter of a barbecue joint. As he does so, a group of Texans surrounds him, and a rawboned hombre drawls, "Yew're new around here, ain't yew?" Then the hombre buys the Yankee a slab of beef ribs — and at his first bite, the prissy guy morphs into John Wayne in a ten-gallon hat.

"Now, *that's* good eatin', pilgrim!" he says.

At that, everyone draws six-shooters, yells "Yee-hah," and blasts holes in the ceiling.

That ad — plus the persistent rumor that emus were carriers for various avian flu strains — put an end to the emu and ostrich boom. Most of the ranchers went bankrupt, and they set thousands of birds free.

The freed birds went feral and got mean. Something about roaming wild, or about the diet available to them in the Hill Country, turned them into vicious marauders. By 1993, flocks of emus and ostriches ranging from a half dozen to several hundred birds were roaming through the hills destroying property and occasionally slicing or trampling people and livestock to death. Still more deaths resulted as many of the bullets and shotgun blasts intended for the tiny heads of emus instead hit the people being attacked. To make matters worse, shots to the emus' double-feathered bodies tended not to kill them right away, but made them stomp and kick even harder.

Thus, to their shock, Texans discovered that firearms were an ineffective defense against emus. Or, to be accurate, we rediscovered that fact...because the Australians learned the same lesson in 1932, when troops armed with machine guns and artillery attempted to destroy a flock of twenty thousand emus that was devouring Western Australian crops. The campaign failed, however, when the besieged emus split their army into squads and adopted guerrilla tactics. In the end, the 1932 Emu War resulted in exactly twelve enemy casualties — and in the decision to build a six-hundred-mile-long fence between wilderness and farmland.

That solution wasn't practical for the Lone Star State, but the members of the Texas Legislature realized they had to do something. So scientists at Texas A&M University were commissioned to 1) find a way to wipe out the roving emu and ostrich flocks over the long term, and 2) find a way for people to defend their families in the meantime without wasting ammunition and/or killing each other.

There's nothing the Aggies like better than a challenge that involves both livestock and weaponry, so by the fall of 1994 they had solved both problems.

The first problem would be handled by air-dropping contraceptive food pellets over the thousands of acres of tree-covered hills where the birds roamed and hid. Then, over the course of a decade or so, the flocks would dwindle and disappear.

The second problem would be dealt with by state-subsidized emu pistols. These were ultrasonic-pulse devices designed to daze the birds long enough for endangered humans to either get to safety or use a firearm at point-blank range. A sustained ultrasonic blast aimed at an individual bird's head could possibly kill it, but the Aggies envisioned that most situations would call for blasts fired in a wide pattern so as to incapacitate an entire flock for a short period of time.

The Legislature decided that one emu pistol would be provided to every rural household in counties with confirmed feral emu sightings, and that extra weapons would be available at nominal fees. City dwellers, however, would have to pay full retail. Or they could rent a pistol if they just wanted to go camping for the weekend.

Unfortunately, the emu pistols' manufacture and release to the public were delayed by legislative wrangling. The weapons had initially been designed for use against emus only, but then a representative from Dripping Springs rose to point out that ostriches, while fewer in number, had also caused plenty of trouble. Specifically, they had smashed his carport. So the Legislature asked the Aggies if the pistols would work on ostriches, and the Aggies replied that while the frequency required to stun an ostrich differed from that required to stun an emu, the pistols could be built with both.

Then a state senator from Nacogdoches described how he had been trampled and spat upon by camels during a vacation trip to Big Bend. Camels, he insisted, were far more hostile to man than either emus or ostriches — and if the so-called emu pistols did not include a setting for camels, he would block the appropriation for their manufacture.

Legislators from the Big Bend region were furious, and they insisted that the few camels wandering their districts were relatively tame. But the senator held his ground, and the Aggies finally agreed to include a camel setting on the pistols...even though it was soon well known that the setting was virtually useless, and that the only way to stun a camel with an emu pistol was to use it as a shiny object to induce hypnosis.

So it was that my own emu pistol had a three-position selector switch, and I clicked it back and forth as I searched the Web and found no mention of any such pistols or switches. I did find an article about the senator from Nacogdoches, though, in which he still claimed that he had been trampled

and spat upon while visiting Big Bend. In this version, however, he blamed a combined group of gay-rights and Earth First activists. I began to think it could have been anybody.

I logged off, then shut down the computer and sat in my office staring at the emu pistol.

Even if I had imagined the other discrepancies, the pistol was tangible evidence that either I or the world had been transformed in the moment that my Dodge had crumpled into a useless hulk.

It was tangible evidence, in fact, that I and this new reality might not even belong in the same plane of existence.

**B**UT ON SATURDAY morning Barb drove us to Katz's Deli on 6th Street in Austin — and when we arrived, everything there felt normal and right. We had been going to what I called "Herd Breakfast" on Saturday mornings with our friends Caroline, Warren, Bud, and Sven for almost ten years, and today they all seemed to be just as I remembered them from before the accident.

The breakfast conversation began with words of sympathy about my wreck, after which the Herd shifted gears as a group and gave me grief about whether I had been wearing clean underwear in case of a trip to the hospital. This sort of shift was typical and therefore reassuring.

Then the trouble started again.

"Speaking of underwear," Caroline said, her eyes lighting up the way they do when she's about to plunge into a real briar patch of a topic, "what kind of person would think that exposing her thong to the President of the United States was an appropriate thing to do?"

"What kind of President would agree?" Bud asked, grinning through the steam from his coffee cup.

Warren groaned. "Who really cares?"

"The congressmen pursuing impeachment," Barb said.

"They're just jealous because someone is having sex and it isn't them," Sven said. He took a sip of his Diet Coke. "I'm a little miffed about that myself, actually."

I was both appalled and confused. "What on earth are y'all talking about? Was there something about this in the paper this morning?"



They all stared at me.

"I mean, it's ludicrous," I said. "President Ferraro would never put up with stuff like that."

Everyone laughed, but I didn't know why.

On the way home, Barb stopped at the supermarket to drop off the disposable camera, with its photos of the mangled Dodge, for developing. I waited in the car while she went inside because I was afraid of seeing anything else that I knew hadn't been in the world before Thursday.

I turned on the car radio and flipped around the dial, and pretty soon that seemed to be a bad idea too. I hadn't heard of half the bands or songs. But then I realized that had been true before the wreck, too. Pop-music ignorance was just a function of being forty.

I couldn't blame everything else on that, though. So far, this new reality didn't seem to have changed anyone I knew — but I couldn't help fearing that I had changed. I couldn't help fearing that I had been swapped for the man Barb and our friends remembered. And I couldn't help wondering how they would react when they found out.

When Barb returned to the car, she gave me a package of "Nutter Butter" cookies that she seemed to think were my favorites. So I ate one, and it was pretty darn tasty.

But I had never eaten one before. I had never even heard of them.

I didn't tell Barb, though.

For now, I still wanted her to think that her husband had survived.

I spent most of Saturday afternoon and evening watching familiar old movies like *Casablanca*, *Body Heat*, and *Blazing Saddles*, and I found no more discrepancies like the hair problem in *Groundhog Day*. Even so, I didn't want to go down the hall to my office to try to work. I was afraid that whatever story-in-progress I pulled up on my computer screen would be something I had never even started writing.

By bedtime, however, I had almost convinced myself that I was being silly. Each of the things that had seemed unfamiliar or weird since the accident — the Nutter Butters, the Presidential scandal, the X-ray machine, etc. — had been a thing outside myself. So there was no reason to think that any of my work was anything other than what I remembered it to be.

But on Sunday morning, I opened the closet in my office to get a fresh ream of paper and happened to glance up at the shelf that holds copies of my published books.

I didn't recognize one of them.

My hands were shaking as I pulled that book down to look at it. Its title and dust jacket were utterly unfamiliar. So was its title page.

Its contents page, though, was another matter. The book was a story collection, and I recognized all of the titles except the last one. In fact, other than that title, I recognized the page itself. It was from my collection *Bloody Bunnies*, which had also been the title of a story I'd written especially for the book. A story that wasn't there anymore.

In its place was a story I'd never heard of, and the book itself was stamped with the ludicrous title *One Day Closer to Death*.

That was it. I'd had enough.

"Who wants to read a book called *One Day Closer to Death*?" I yelled. "And who cares if this Blackburn guy bakes cookies or not?"

I went on in this vein for a while. When I finally looked up, Barb was standing in my office doorway with an expression on her face that went beyond concern. It went all the way to contemplation of signing me up for electroshock therapy.

"What would a better title have been?" she asked.

"The same one I already used! *Bloody Bunnies*!"

Barb frowned. "That doesn't sound too good."

I was stunned. "*Bloody Bunnies*" was the best story I'd ever written, and Barb had said so. I was sure of it.

Then I realized that I couldn't remember a single thing about it except its title.

And that was the final proof.

This world was not my world. The people closest to me might seem the same, but too much else was different.

Either I was dead and this was the Afterlife, or I was alive and stuck in an alien reality. Either way, I was no longer where I belonged.

That left me with only two options.

One was to try to adapt to my new surroundings. But in a world where even my books and stories were different, in a world with no *Bloody Bunnies*, I wasn't sure that I'd have much luck.

So I decided to try my other option first.  
I would try to find a way back home.

I slept through Sunday night because I was too exhausted to stay awake. The only dream I had involved an emu, an ostrich, a camel, and a Harvey-sized bleeding rabbit all attempting to draw and quarter me. Then they gave up, and the rabbit just smothered me.

When I awoke Monday morning, Rufus was curled up on the bed two inches from my face. I yelped, and he opened his eyes halfway and yawned before going back to sleep.

Barb, still in her nightgown, came into the bedroom from the bathroom. "Something wrong?" she asked.

"Just a bad dream," I said. "Asphyxiation by giant bunny." I began to sit up, and pain shot through my right side. I had slept without taking the useless pain pills or wearing the rib belt, but I would have to try the belt again.

Barb was shaking her head. "I don't think you're in shape to drive. But I can't reschedule my interview, so we'll have to reschedule with the veterinarian instead."

"Huh?" I asked.

"I have a job interview at 9:00," she said. "Don't you remember?"

And now I did, sort of. At least, I knew that Barb was on a job hunt — in this world too, it seemed. "Yes. Sorry. I'm still half asleep." I hoped that would be a sufficient excuse. "And what's this about the vet?"

"Last Wednesday you made a 9:30 appointment for Rufus to have his blood sugar checked today."

Well, how could I have known that? In the place I had been last Wednesday, Rufus had been dead for two years.

"But since we only have one vehicle now," Barb continued, "we'll have to reschedule. Otherwise you'd have to drive me to the interview, zoom back south to take Rufus to the vet, and then pick me up. I doubt that your ribs are up to it."

My ribs hurt, all right, but Barb had given me an idea. Our veterinarian's office was only a mile from the site of my wreck. If I really wanted to get back to the world I remembered, I would have to begin at the spot where things had changed. And I would have to go there without Barb.

I got up from the bed, doing my best not to grimace. "I'm feeling better," I said. "I can drive."

Barb was dubious. "I'm not sure that's a good idea. I almost lost you last Thursday, and I don't want anything like that to happen again."

I forced a smile. "What are the odds?"

After showering and dressing, and while Barb was putting on her interview clothes, I took the black nylon bag with the emu pistol to the garage and slid it under the driver's seat in the Saturn. It was the only thing that I knew for sure came from my rightful world, and I wanted it with me when I revisited the scene of my reality shift. I didn't know what I would do when I got there, but I wanted to be ready if I gained any sudden insight. I was even wearing the same clothes that I had worn at the time of the wreck — blue jeans, black T-shirt, leather jacket. The only difference was that I was wearing the rib belt, too.

After stashing the emu pistol, I undertook the adventure of putting Rufus into his carrier. The carrier was nothing more than a cat-sized plastic box with air holes, a wire door, and a handle — but Rufus seemed to think it was a meat grinder. Each time I got any two of his feet inside, the other two would grab the outer edges and hang on. I tried putting him in frontward, backward, and sideways, but nothing worked. I got a few scratches out of the deal, though.

Finally, Barb came out of the bedroom wearing a crisp navy business suit, scooped up Rufus, and tucked him into the carrier without getting so much as a wisp of fur on her sleeve.

"You usually don't have any trouble with this," she said as she closed and latched the wire door. "Are you sure you want to drive?"

I was breathing hard and my ribs ached, but I said I was fine.

Then I drove Barb to downtown Austin through the city's abominable rush hour traffic, made worse by the fact that this was yet another damp, gray day. But despite the wet asphalt and the countless drivers who didn't understand the concept of hydroplaning, I delivered Barb to the right address by 8:45 with no difficulties other than constant pain. The rib belt didn't seem to be helping.

As Barb opened her door, she pointed at a coffee shop across the street. "Can you meet me there in two hours?"

"Sure," I said, and wondered whether it was true. If I somehow managed to slip back through the truck-wreck reality rip into the world I came from, would Barb still be downtown for an interview? And would the "I" who belonged in *this* reality be able to slip back through as well...or had he died in the accident?

"Are you going to be okay?" Barb asked.

At that point, Rufus let out a pitiful yowl from the carrier in the back seat.

"I'd better be," I said. "I don't think Rufe would put up with waiting here."

That answer seemed to make Barb feel better. She kissed me and I wished her luck, and then she headed into the building for her interview.

I turned the car around and drove south while fighting off my sense of guilt by telling myself that I was trying to do the right thing. Even if finding my way back home meant leaving this world's Barb a widow, I argued, wouldn't that be better than leaving her with a false husband from another dimension?

The veterinarian's office was as I remembered it, and so was everyone there. They were gentle and efficient with Rufus, and they finished his bloodwork even more quickly than I had hoped. It turned out that he needed a slight boost in his insulin dosage, but was doing well otherwise. He had even gained a few ounces since his last visit, they said. He was up to eleven pounds. That was still down from the thirteen of his glory days, but not bad for a twelve-year-old cat with diabetes.

I was able to get him back into the carrier without help. Then I paid the bill, thanked the doctor and his staff, and took Rufus out to the Saturn. Once inside the car, I found a notepad and pen in the glove compartment and wrote out the new insulin instructions. I tore off the page and folded it, wrote Barb's name on the outside, and tucked it into one of the carrier's air holes. Just in case.

Then, with Rufus strangely quiet, I drove to the curve on Brodie Lane where I had died.

I approached from the north, just as the Nissan that had hit me had done, and then pulled off onto the narrow strip of gravel between the asphalt and the ditch. I didn't see any ripple in the air or feel my hair stand on end, but my pulse quickened anyway.

This was where it had happened. This was where my mangled Dodge had stopped, and where I had stumbled into the drizzle clutching a black nylon bag from another world.

There was no traffic from either direction, but to be safe I scooted over the brake lever and got out of the car on the passenger side. My first step made a crunching sound that wasn't gravel, so I looked down and saw shards of blue, black, and amber plastic. They were the remains of the Dodge's grille and turn signals.

I stood there gripping the rubbery top edge of the open Saturn door, staring down at the Dodge fragments, and wondered what I had been expecting to find. There was no doorway back to the world I remembered. There was only slick pavement, a muddy ditch, and broken plastic.

Then a gray streak shot past my legs and leaped into the ditch.

It was Rufus. Apparently, I had failed to latch the wire door on the carrier. So now he was out of the car and down in the ditch, chasing something I couldn't even see. A field mouse, maybe. Or maybe nothing at all.

I jumped down after him, and when I landed it was as if I had been run through with a javelin. My ribs blazed, and I dropped to my knees. The air turned a misty red for a few seconds — and even when I could see clearly again, my head and ribs continued to throb with each beat of my heart.

Rufus had stopped about thirty feet to the north and was looking back at me with an annoyed expression, as if I had scared off his mouse.

Then I heard a loud hiss above me, and I looked up and saw the emu on the other side of the fence.

It was huge. Six feet tall, eight feet long.

And this section of fence was missing three strands of barbed wire, leaving it about two feet high.

The emu cocked its head and bent its long, feathered neck to look down at me. Then it hissed again and stamped its foot, giving me a good view of its talons. They looked sharp. And there were three more just like them on the other foot.

I tried to yell and wave my arms to spook it. But all I could manage was a wheeze, and waving my arms only twisted the javelin in my ribs. It hurt so much I almost cried.

The emu's throat swelled, its beak opened wide, and it let out a roar like cannon fire.

Then it hopped over the fence into the ditch. Its feet hit the wet ground with a loud thud.

"Shoo," I rasped.

The emu took a step, and now it was within kicking distance of my face. Within kicking, gouging, and shredding distance.

I could see in its evil little eyes that it was an emu from *my* world. And an emu from my world would just as soon gut you as look at you. It had come through the reality rip with me on Thursday, and it had been hanging around Brodie Lane for four days, waiting for someone to maim.

And unless I could move fast, that someone would be me.

But I couldn't move fast. I wasn't sure I could move at all.

Then the gray streak shot past me again, and the startled emu leaped back up toward the fence.

Rufus, in this world as in mine, didn't care that the emu was enormous and deadly. All he saw was a big bird. All he saw was something to chase.

Or maybe he was trying to protect me. Because even when the emu stopped with its back to the fence and began kicking and stomping, Rufus kept after it. He matched the thing hiss for hiss and swiped at it with his pitiful little paws, dodging this way and that — when he could have, should have, turned and run.

Whatever his motivation, the result was that he distracted the emu long enough for me to lurch to my feet and stagger up to the Saturn. I fell into the car, howled as the javelin spiked me again, and clawed under the driver's seat for the black nylon bag.

I was mostly insane at that point, but I had one clear thought screaming at me over and over:

*Not this time! NOT THIS TIME!*

I couldn't get that out of my head...even though I knew that if I did nothing, I would be on my way back home. Because as Rufus had run toward the emu, I had realized what it would take to reopen the rip between worlds. I was as sure of it as I was of the pain in my side.

If the emu killed Rufus, then that one event would again be as I knew it had been. And then everything else would topple back to the way it all was before, one domino after another, as quick and inevitable as a truck wreck.

That was why I had come back to the curve on Brodie Lane. That was what I had wanted ever since the accident.

But in the moment that Rufus's stupid little cat brain had once again decided that it was a good idea to stand up to a six-foot-tall psychopathic monster, I had reconsidered.

Maybe I didn't belong in this reality. Maybe this wasn't my world.

But God damn it, my cat was still my cat. And I wouldn't let him die because of my mistake again.

I tore the emu pistol from the bag and made sure the selector was set to E. Then I flipped the arming switch, threw myself backward out of the Saturn, and fell down the muddy slope to the bottom of the ditch again. I landed on my back and looked up through another red haze — but I could make out Rufus and the emu.

The emu was still kicking and Rufus was still swiping and dodging. But Rufus had slowed, and as I raised the pistol in both hands, the emu's right foot came down and caught him.

Rufus shrieked as only a cat can shriek.

The red and green LEDs were glowing, so I drew a bead on the emu's head and pulled the trigger. The handgrip went from cold to hot in a quarter second, and the pistol shuddered and hummed.

The emu's head snapped back as if smacked by a shovel, and then the monster just stood there swaying and blinking.

I kept the trigger depressed and my aim on the emu's head as I rolled onto my left side, got to my knees, and finally stood. Then I clambered up toward the fence yelling "Die, die, die!" or something similar until the business end of the pistol was right against the emu's beak.

"Woark?" said the emu.

Then it fell back onto the fence and lay draped there, staring up at the gray sky.

At that point the emu pistol became too hot to hold, and I dropped it. It landed smoking beside Rufus, whose tail was still trapped under the emu's foot.

Rufus looked up at me and yowled.

I lifted the emu's foot and saw that Rufus's tail had been pressed down into the muddy soil. It was dirty, but it didn't look broken. And the emu's talons had missed it. I didn't blame Rufus for shrieking, though.



I picked him up, hugged him to my chest, and climbed back up to the Saturn. This time he didn't object when I put him into the carrier. And this time I made sure the door was latched.

Then I looked back at the emu. It hadn't killed Rufus again, so I hoped I hadn't killed it either.

I went back across the ditch and found that the creature was still breathing. So after a lot of grunting and javelin-stabs to the ribs, I lugged it off the fence and laid it on the ground. Then it lifted its head, and its legs began to twitch. It would have to be tied up.

I used the only thing I had. I pulled up my shirt, took off the rib belt, and wrapped the emu's ankles together. I wasn't sure the Velcro would hold, but it was the best I could do.

Then I picked up the cooling emu pistol. The barrel was warped, and something inside rattled like cracker crumbs. I flipped the switches back and forth, but the LEDs stayed dead.

I carried the pistol back up to the road...and then I dropped it among the fragments of my Dodge, lifted my foot, and stomped it to bits.

The vet said that except for losing a little fur, Rufus was fine. And as for me, I discovered that I actually felt better without the rib belt.

Meanwhile, Animal Control picked up the emu. (A few weeks later, it was shipped two hundred miles north to the Dallas Zoo. Better them than us.)

The only black mark on the day was that a few hours after Rufus and I returned to the house, Barb had to call from the coffee shop downtown to ask where I was.

All I could say was, "I'm home."

And so I am. But the world still seems a bit off kilter, and I'm reminded of that every time I look at the photos Barb took of me and my wrecked pickup.

In one of the photos, there are two of me. I'm standing on either side of the Dodge's crumpled engine compartment, and one of me is holding an emu pistol. And behind the truck, glaring around the corner of the camper shell, is an evil-eyed emu.

I've shown this photo to my friends without telling them what I see in it. And as far as I can tell, everybody else sees only one of me — sans emu pistol, sans emu.

I have no explanation, and the only other piece of tangible evidence has been stomped. So I've fallen back on what most people with no explanation or evidence fall back on: Belief.

Most often, I choose to believe that the wreck knocked my brain around just enough to result in a small shift in my perceptions, which in turn resulted in small discrepancies between the world I now perceive and the world I perceived prior to cracking up on Brodie Lane.

Other times, I entertain the quasi-religious notion that no one ever dies, but instead pops out in an almost-but-not-quite-the-same reality in which he or she goes on living and driving and drinking coffee — and maybe even getting to pet a resurrected cat.

But whatever the truth may be, I've discovered that the differences between this world and my previous one don't often cause problems. In fact, I rather like the absence of rampaging emu and ostrich flocks, and I don't need a camel to spit on a state senator. And while I do miss the accomplishments of the Ferraro administration (such as the Universal Health Care and Child-Proof Trigger Lock Initiative), at least the guys running the show in this new reality are keeping themselves busy.

So for the most part, things are going well. Barb got the job and likes it a lot. Our pets are old, but alive and happy. Herd Breakfast is as regular as the tides, and Caroline and Sven humiliate me at cutthroat pool precisely as I remember. My cracked bones have healed, and I have a new Dodge that'll be paid off in five years, barring further reality shifts.

Once in a while, though, a difference between worlds does trip me up. So I'd like to ask a favor.

If I'm in the supermarket and I don't seem to understand the concept of "Express Lane"...or if I refer to the Prime Minister of Canada as "Michelle Pfeiffer"...or if I attempt to jump-start your SUV with the battery in my pocket watch...or if I see you playing a video game and say, "I thought those were taken off the market because of the tumors"...or if I fail to understand the critical reasoning behind Oprah Winfrey's book club selections...

Please, have a little patience. Give me a break, and cut me some slack. Buy me a slab of beef ribs.

After all, I'm new around here. ॐ

# Fantasy & Science Fiction MARKET PLACE

---

## BOOKS-MAGAZINES

---

S-F FANTASY MAGAZINES, BOOKS. 96 page Catalog \$5.00. Collections purchased (large or small). Robert Madle, 4406 Bestor Dr., Rockville, MD 20853.

USED SF/FANTASY BOOKS. Pb/HC/Art. \$3 for large catalog. Inter-galactic Book Works, PO Box 968-SF, Merrimack, NH 03054-0968. E-mail: dck@bkwks.mv.com

PARALLEL WORLDS, Stories on CDROM's - \$9.95. ECS, 7045 Flora Way, Lake Wales, FL 33853-9607.

FREE CATALOG of science fiction books. Hardcovers, paperbacks. David Campisi, 9 Gaskill Ave., Albany, NY 12203.

THE ROBOT'S TWILIGHT COMPANION - first collection of Tony Daniel, \$24.95; PERPETUITY BLUES, best of Neal Barrett, Jr., \$21.95. Golden Gryphon Press, 3002 Perkins Road, Urbana, IL 61802.

BACK ISSUES OF F&SF: Including some collector's items, such as the special Stephen King issue. Limited quantities of many issues going back to 1990 are available. Send for free list: F&SF, 143 Cream Hill Rd., West Cornwall, CT 06796

THE BEST FROM Fantasy & Science Fiction, The Fiftieth Anniversary Anthology, edited by Edward L. Ferman and Gordon Van Gelder.

A hardcover collection of the best stories from the last five years of F&SF, including work by Le Guin, Wolfe, Bisson, Bradbury, Ellison, Sterling, Wilhelm and many others. \$24.95 including P/H from F&SF, 143 Cream Hill Rd., West Cornwall, CT 06796.

---

## MISCELLANEOUS

---

MANUSCRIPTS WANTED. Subsidy Publisher with 75-year tradition. Call 1-800-695-9599.

AGENT looking for new authors, send sase to: Jan, GEM Literary, 4717 Poe Rd., Medina, OH 44256.

FREE Amazing Thrilling Old-Radio Show Guaranteed To Chill Your Bones! Write: Sci-Terror, Box 577A, Fayetteville, AR 72702.

SCIFI CARDS, CALENDARS, Posters. From \$9.95. Original art, inkjet. Free brochure. M.C. Van Volkenburg, 6203 Forestgrove Blvd., Orlando, FL 32808

ART ORIGINALS! Love F/SF/H book cover art? Seek no more! Color catalog \$10 ppd, or [www.wow-art.com](http://www.wow-art.com) for huge selection. Worlds of Wonder, POB 814-FSF, McLean, VA 22101.

BETRANSPORTED. Celestial Navigations. The leading spoken word group in the galaxy. 888-301-2417. [www.CelestialNavigators.com](http://www.CelestialNavigators.com)

F&SF classifieds work because the cost is low: only \$1.50 per word (minimum of 10 words). 10% discount for 6 consecutive insertions, 15% for 12. You'll reach 100,000 high-income, highly educated readers each of whom spends hundreds of dollars a year on books, magazines, games, collectibles, audio and video tapes. Send copy and remittance to: F&SF Market Place, 143 Cream Hill Road, West Cornwall, CT 06796.



## CURIOSITIES

### *THE VOYAGE: AN OPERA* BY PHILIP GLASS (1992)

**C**OMMISSIONED by the Metropolitan Opera to premiere on the Columbus quincentenary, 10/12/92, the opera ran for seven or eight performances in that season, was brought back three seasons later for another seven or eight and has apparently been dropped from the repertory. Its prologue (sung by a figure in a wheelchair meant to represent Stephen Hawking) and three acts deal with three voyages: 1) Spacefaring aliens land on Earth in a prehistoric past and are greeted by primitive Earth natives who greet them as transcendent figures; 2) Columbus, deep in dream as his ships sail West, dreams of Queen Isabella urging him on and declares his (sexual) love for her; 3) the aliens, millennia later, now "spacechildren" in a highly evolved technology, prepare to return to their planet of origin, reclaim their heritage and their destiny.

It is the true science fiction opera, with the arguable exception of the metaphoric and metaphysi-

cal *Anniara* probably the only science fiction opera, the stunning first act finale — all tom-tom and ostinato and Patricia Schuman, the alien captain, tearing out her throat in stopped vowels and the aural equivalent of strobe lighting — is overwhelming. "For God's sake, listen to this," I said to Robert Silverberg, calling him in California (the opera was broadcast from the stage on one-hour delay), "It's finally happened, they've put what you and I dreamed when we were thirteen on the stage of the Metropolitan Opera at Lincoln Center on national broadcast. It's Simak, it's Heinlein, it's Chad Oliver made whole." Silverberg caught the second and third acts but was rightfully unimpressed; nothing in the opera ever gets back to the power of the first act and its finale. Doesn't much matter, in those forty-five minutes Glass and his librettist, David Henry Hwang, give us *Astounding's* early 1940s in full and desperate cry. ☞

—Barry N. Malzberg

IF ISAAC NEWTON WASN'T SO  
DEADLY SERIOUS...



I GOT IT!

Q. WHAT FOOD DOES THE  
DIAMETER OF THIS  
FRUIT MAKE YOU  
THINK OF?

A. APPLE  $\pi$

S. Harris

# Worlds of wonder – only \$25.97

## Subscribe now and save 35%

For about the price of a hard cover book, we'll take you into the 21<sup>st</sup> century with over 1800 pages of compelling fiction and features: stories by both superstar and rising-star writers, along with lively and informative departments on Science, Books and Films. Your subscription will include a special double anniversary issue, which alone has over 100,000 words of new short stories and novellas. And if you subscribe now, you'll pay only \$25.97; that's a savings of \$13.62, or 35% off the newsstand rate.

☐ Send me a full year of *Fantasy & Science Fiction* at the special rate of \$25.97, a savings of 35%.

Name

Address

City

St/Zip

☐ Payment enclosed    ☐ Bill me

☐ Charge my MC / Visa

☐ New    ☐ Renewal

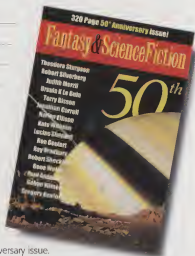
Acct No.

Exp. date

Outside the US add \$8 postage. Make checks payable in US dollars drawn on a US bank. Allow 6 weeks for delivery of first issue.

We publish 11 issues a year, including a double Oct/Nov anniversary issue.

SUBSCRIBE ONLINE AT [WWW.FSFMAG.COM](http://WWW.FSFMAG.COM)



# Fantasy & Science Fiction

143 Cream Hill Rd, West Cornwall, CT 06796